



## WEST BENGAL HOUSING BOARD

(Estd. under W.B. Act XXXII of 1972)

'A B A S A N', 105, S. N. Banerjee Road, Kolkata – 700 014,

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Wave site : [www.wbhousingboard.in](http://www.wbhousingboard.in) Email : [wbhousingboard@gmail.com](mailto:wbhousingboard@gmail.com)

Memo.No.:663/JD(EW)-III/HB

Date : 27.01.2021

### NOTICE INVITING TENDER

(e-NIT)

NIT No:-WBHB/JD(EW)III/NieT- 02/2020-2021

Joint Director (EW)-III, West Bengal Housing Board, 'ABASAN', 105, S. N. Banerjee Road, (4th Floor), Kolkata – 700 014, invites sealed Tender/Bid in two Envelopes system, i.e. Technical Bid (Part-A) & Financial Bid (Part-B) in prescribed printed form of WBHB from eligible Bidders for the work detailed in the Table below as per particulars given hereunder :

Sl. No.	Name of Work	Estimated Amount (Rs.)	Earnest Money	Cost of tender documents (Non- refundable)	Period of Completion	Engineer-in-charge of the work	Eligibility of Bidder
1.	"Repair and Renovation of Bituminous Road at Shilpakanan Housing Project, Phase-III, Durgapur under West Bengal Housing Board".	Rs.10,89,612.00	Rs.21792.00 To be deposited in the mode of ON LINE (Net banking / NEFT / RTGS) in favour of 'West Bengal Housing Board'.	Rs. 1000.00 (per set) for 4(Four)to be deposited by the successful Bidder during formal agreement after issuance of LOA. Cost of Tender document is not required during participation in NIT.	30(thirty ) days	Deputy Director (EW)-III/ SKHP	Bonafide resourceful & reliable outsider eligible through pre-qualification as per Clause No. 4(i) of this Nle-T

1. In the event of e-filling, intending bidder may download the tender documents from the website: <http://etender.wb.nic.in> directly with the help of Digital Signature Certificate & Earnest Money has be deposited by the bidder electronically:

- Online through his net banking enabled bank account, maintained at any bank or:
- Offline through any bank by generating NEFT/ RTGS challan from the e-tendering portal.

(i) Net banking (any of the banks listed in the ICICI Bank Payment gateway) in case of payment through ICICI bank payment gateway. Intending Bidder will get the Beneficiary details from e-tender portal with the help of Digital Signature Certificate and may transfer the EMD from their respective Bank

(ii). **RTGS/NEFT in case of offline payment through bank account in any bank.)**

Intending bidder who wants to transfer EMD through NEFT/RTGS must read the instruction of the Challan Generated from E Procurement site. Bidders are also advised to submit EMD of their bid, at least 3 working days before the bid submission closing date as it requires time for processing of Payment of EMD.

Bidders eligible for exemption of EMD as per Govt. rule may avail the same and necessary documents regarding the exemption of EMD must be uploaded in the EMD folder of Statuary bid documents.

The rate of the Tender in this percentage form of contract is to be submitted duly digitally signed in the website Within stipulated date and time. The hard copy of the documents given online should be submitted. The lowest bidder should produce in original to the office of undersigned for verification.

**Three Government of West Bengal Enterprises viz. "Mackintosh Burn Limited.", "Westinghouse Saxby Farmer Limited", and "Britannia Engineering Limited", are exempted from earnest money for participation in tender vide Order No. 430(3)-W(C)/1M-208/15 dated 31.08.2015 of The Joint Secretary, P.W. Department, Works Branch, Govt. of West Bengal subject to the condition that they will furnish Security Deposit if selected in the tender.**

2. Both **Technical bid and Financial Bid** are to be submitted in technical (Statutory & Non-Statutory folder and financial folder concurrently duly digitally signed in the website <http://etender.wb.nic.in> as per tender time schedule stated in **Sl. No. 12.**

The documents submitted by the bidders should be properly indexed & digitally signed.

3. The FINANCIAL OFFER of the prospective Bidder will be considered only if the TECHNICAL Document (both statutory and non-statutory) of the Bidder found qualified by the Tender committee W.B.H.B.

The decision of the Tender committee, W.B.H.B. will be final and absolute in this respect.

The both list of Responsive and Non-Responsive Bidders will be displayed in the website and also in the Notice Board of the Joint Director (EW)-III, W.B.H.B. on the scheduled date and time.

4. **Eligibility criteria for participation in the tender.**

- i) (a) The intending tenderer should produce credential of a similar nature of completed single work having minimum value of **40% (Forty percent)** of the estimated amount put to tender during last 5(five) years prior to the date of issue of this e-Tender notice.

**OR**

(b) The intending tenderer should produce credentials of 2(two) similar nature of completed works, each having minimum value of **30% (Thirty percent)** of the estimated amount put to tender during 5(five) years prior to the date of issue of this e-Tender notice.

**OR**

(c) The intending tenderer should produce credential of one single running work of similar nature which has been completed to the extent of **80% (Eighty percent)** or more and value of which is not less than the desired value at (i) (a) above.

In case of running works, only those tenderers who will submit the certificate of satisfactory running works 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 panel action has been initiated against the executed agency i.e. the tenderer.

N.B. 1) Credential/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) Reason for abnormal delay, if any (g) Final bill amount .

2) Credential certificate issued by the Executive Engineer or equivalent competent authority of a state/ central Govt, state / Central Govt, undertaking, statutory, autonomous bodies constituted under the statute of the Central / state Govt. On the executed value of work will only be taken as credential. 3) Payment Certificate will not be treated as credential. Details of such work experience are to be furnished in Section-2, Form-VI. [Non statutory Documents].

**Joint Venture will not be allowed for each of identical works. In case the intending bidder (civil contractor) has no electrical papers of his own, then Joint Venture of civil contractor (Prime Agency and with electrical counterparts will be allowed for particular work through MOU (Memorandum of Understanding) which should be notarized as per Court of Law and the same is to be documented through e-Filing.**

iii) The prospective bidders or any of their constituent partner shall neither have abandoned any work nor any of their contract have been rescinded during the last 5 (five) years. Such abandonment or rescission will be considered as disqualification towards eligibility. (A declaration in this respect has to be furnished by the agency without which the Technical Bid shall be treated as non-responsive.)

iv) Any intending bidders who have failed to execute any works contract under this department and was terminated by any sub-rule under Clause-3 of WBHB Tender Form or terminated under any Clause of standard bidding document by Engineer-in-Charge/ Employer during last 05(five) years will not be eligible to participate in this bid.

**v) Net worth of the bidder's for the last year, calculated on the basis of capital, profit and free reserve available to the firm should be positive.**

vi) The available **Bid Capacity** (to be calculated on the basis of prescribed format) of the prospective applicant shall not be less than the Estimated amount put to tender as Detailed in **Section-2, Form-II(Financial)**.

**Each and every field of Section -2, FORM-II (Financial) must be filled-up properly by the applicant and the Chartered Accountant as given in the said form.**

vii) The prospective Bidders shall have in their full time engagement Technical personnel with adequate experience, the minimum being **1 (One) No Civil Engineering Diploma Holder**. The Bidder will furnish the documents of Qualification and experience of such Technical personnel for Technical Evaluation as per **Form-IV, Section-2.** [Non statutory Documents]

viii) The prospective Bidders should own or arrange through lease deed (lease hold agreement) the required plant and machineries of prescribed specifications as shown in format (Details as mentioned in **Section-2, Form-V**). Conclusive proof of ownership (Tax Invoice, Way Bill, Delivery Challan,) for each plant and machineries in working condition shall have to be submitted. Present location of installation of main Plant and Machineries as mentioned in specified format has also to be disclosed. Present status / location of all the Plant and Machineries are needed to be provided. If the same is already engaged in the other works, then name of client along with his contact number should be furnished in the declaration by the intended tenderer countersigned by the client with tentative date of release of such Plant and Machineries where the same are presently engaged. If necessary, authority/ screening committee may inspect Plant and Machineries physically or call for the original documents as proof of Ownership in favour of owner / lessor of the same. Plant and Machineries should be owned or arranged through lease deed (lease hold agreement) by the Applicant.  
**[Non Statutory Documents]**

In this connection, self declaration (Proforma enclosed : Section - 2, FORM - v) shall also have to be submitted along with 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 15 Days (maximum) from the date of L.OA/ Work Order.

ix) The **Working Capital** shall not be less than 15(Fifteen) percent of the amount put to tender out of which minimum 10% shall be of applicant's own resource.

x) Copies of Income Tax Acknowledgement Receipt for the latest Assessment year / Professional Tax Clearance Certificate / P.T. (Deposit Challan) / Pan Card / GST. Registration Certificate/ Voter ID

Card for self identification are to be accompanied with the Technical documents [Non statutory Documents ]

xi) The agency should have GST. number/should possess for **GST number** and copies of necessary documents to this effect is to be submitted along with technical documents[Non statutory Documents].

xii) The prospective bidder would also have **Provident fund enrolment No.** issued by appropriate authority[Non statutory Documents].

xiii) The Partnership Firm shall furnish the registered partnership deed **along with Power of Attorney to be submitted along with the application.** and the company shall furnish the **Article of Association and Memorandum.** [Non statutory Documents].

xiv) In case of Proprietorship and Partnership Firms and Company the Balance Sheet & Profit and Loss A/c. and all schedules forming the part of Balance Sheet and Profit and Loss Account for the last 3 (Three) years (year just preceding the current Financial Year will be considered as year-1).The Balance Sheet and Profit and Loss Account including all schedules forming the part of Balance Sheet and Profit and Loss Account should be in favour of applicant. No other name along with applicant name, in such enclosure will be entertained. **[Non Statutory Documents]**

xv) Declaration in **Form –III** of “Qualification Information”(Section-2), regarding Structure and Organization duly digitally signed by the applicant shall be submitted along with application.

xvi) Financial Statement in **Form –II** of “Qualification Information”(Section-2) digitally signed by the applicant shall be submitted along with application.

xvii) 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.

5. Agencies shall have to arrange land for erection of Plant & Machineries, storing of materials, labour shed, laboratory etc. at their own cost and responsibility nearest to the work site.

6. The successful tenderer shall establish field testing laboratory equipped with requisite instruments in conformity with relevant code of practice and technical staff according to the requirements of the works to be executed.

7. All materials required for the proposed work including Cement, Steel, Bitumen, stone chips etc. shall be of specified grade and approved brand in conformity with relevant I.S. code (latest revision) & manufacturer, and shall be procured and supplied by the agency at their own cost including all charges for carriage, taxes, royalties etc.

i) **Steel materials**(If require):- **Only branded steel of SAIL/TATA/RINL brand duly test certified will be allowed to use** {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 reflect on the approved drawing of this department} .

ii) **Cement (If require)** :- Cement procure 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 reflect on the approved drawing of this department or as stipulated in the WB. PWD schedule of rates.-2017

ii) **Bitumen** :The Bureau of Indian Standards (BIS) introduced paving grade bitumen specifications (IS: 73-1950) for the first time in the year 1950 and classified it on penetration. The specifications were revised in the years 1962 and 1992. To improve the quality of Bitumen, BIS revised IS-73-1992 specifications based on Viscosity (Viscosity at 60oC) in July 2006. As per these specifications, there are four grades VG-10, VG-20, VG-30 & VG-40. A few qualification tests like specific gravity, water content, ductility, loss on heating & Farass breaking point were removed from IS: 73-1992 specifications as these tests do not have any relationship either with the quality or performance of the product. According to viscosity (degree of fluidity) grading, higher the grade, stiffer the Bitumen. Tests are conducted at 60o C and 135o C, which represent the temperature of road surface during summer (hot climate, similar to northern parts of India) and mixing temperature respectively. The penetration at 25o C, which is annual average pavement temperature, is also retained.

Authenticated evidence for purchase of Steel, cement and bitumen are to be submitted along with challan and test certificate. In the event of further testing opted by the Engineer-in-Charge, such testing from any Government approved Testing Laboratory shall have to be conducted by the agency at

their own cost.

All the clauses and additional conditions incorporated in **WBHB Tender Form** in connection with the issue of Departmental Materials and Machinery will not be applicable in this contract.

8. **Constructional Labour Welfare Cess @ 1(one) %** of cost of construction will be deducted from every Bill of the selected agency. Royalty & all other statutory levy will have to be borne by the contractor. Successful bidder have to obtain **Cess Registration certificate(as applicable as per norms)** with the labour department, Govt. of West Bengal located in the area where the construction project /work is to be executed before issuance of work order [Non statutory Documents].

9. **Adjustment of Price( increase or decrease) shall not be applicable for the proposed work.**

Since B.O.Q. for the works under this N.I.T. is based upon the P.W.D(W.B) schedule of Rates(Roads) 2018 effective from 30.08.2018(both for civil & electrical works), along with corrigendum's(up to 9th corrigendum-(Road and Bridge works)) of P.W.D(W.B) schedule-2017, the bidders shall quote their rate (**percentage above / below / at par**) accordingly considering that no escalation and / or price adjustment will be allowed by the department thereto under any circumstances.

10. Running payment for the work may be made to the executing agency as per availability of fund.

NB. **No Mobilisation Advance and Secured Advance** will be allowed.

11. Bids shall remain valid for a period not less than **120 (One hundred twenty) days** after the dead line date for Financial Bid submission. 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.

12. **Important Information : Date & Time schedule are as follow :**

Sl.NO.	Particulars	Date & Time
1.	Date of uploading of N.I.T. and Bid Documents (online) (Publishing Date)	27.01.2021 AT 18.00 HRS
2.	Date & time of start of downloading Bid Documents (Online)	27.01.2021 AT 18.00 HRS
3.	Date & time of start of Bid submission (Online)	02.02.2021 AT 11.00 HRS
4.	Date & time of closing of Bid Submission (Online)	19.02.2021 AT 11.00 HRS
5.	Date & time of Bid opening for Technical Proposals (Online)	22.02.2021 AT 11.00 HRS
6.	Date of uploading list of technically qualified bidders (online)	To be notified after evaluation of Technical Bid.
7.	Date & time of Bid opening for Financial Proposal (Online)	To be notified during uploading of Technical Evaluation Sheet of Bidders

**12. A-Further corrigendum and addendum if issued, will be**

**published only on e- tender website.**

13. **Clause No. 25 of Conditions of Contract of the Tender Form of WBHB relating to settlement of disputes has been modified as follows : -**

**"Clause 25** - Except where otherwise provided in the contract all questions and disputes relating to the meaning of the specifications, designs, drawings and instructions herein before mentioned and as to the quality of workmanship or materials used on the work or as to any other question, claim, right, matter or thing whatsoever, in any way arising out of relating to the contracts designs, drawings specifications, estimates, instructions,.

orders or these conditions or otherwise concerning the works, or the executions or failure to execute the same, whether arising during the progress of the work, or after the completion or abandonment thereof shall be dealt with as mentioned hereinafter:

If the contractor considers any work demanded of him to be outside the requirements of the contract, or disputes any drawings, record or decision given in writing by the Engineer- in-Charge on any matter in connection with or arising out of the contract or carrying out of the work, to be unacceptable, he shall promptly within 15 days request the Chairman of the Dispute Redressal Committee in writing for written instruction or decision. Thereupon, the Dispute Redressal Committee shall give its written instructions or decision within a period of three months from the date of receipt of the contractor's letter. The Dispute Redressal Committee shall be constituted with the following officials as members -

1	Secretary, Housing Department, Government of West Bengal	Chairman
2	Housing Commissioner, West Bengal Housing Board.	Member
3	Director (Engineering), West Bengal Housing Board.	Member Secretary and Convenor
4	F.A.-cum-C.A.O., Finance Wing, West Bengal Housing Board.	Member

This provision will be applicable irrespective of the value of the works to which the dispute may relate."

14. Prospective bidders shall have to execute the work in such a manner so that appropriate service level of the Building is to be maintained up to a period of 1 (One) year from the date of successful completion of the work to the entire satisfaction of Engineer-in-Charge. 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 par 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 expense (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 the contractor or from his security deposit. Refund of Security Deposit will only be made on the pro-rata basis i.e. release of such security deposit to the tune of 100% on expiry of 1 year (from date of completion of the work).

**Clause No. 17 of the conditions of contract of the Tender Form of West Bengal Housing Board** has been modified accordingly.

15. Site of work and necessary drawings may be handed over to the agency phase wise. No claim in this regards will be entertained.
16. **Earnest Money** : The amount of Earnest Money @ 2% (two percent) of the Estimated amount put to tender for the work is to be submitted in the mode of ONLINE (Net banking / NEFT / RTGS) in favour of '**WEST BENGAL HOUSING BOARD**' against the work. This clause is applicable for all categories of applicants. Earnest money so deposited by the successful tenderer shall on issuance of work order be automatically converted into part security money and a balance of 8% of amount of each running account bill shall have to be deducted to make it a total 10 % of security deposit of the work.

17. 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 own expense.
18. The Tender Inviting Authority reserves the right to reject any application for participating in bidding process 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 Tenderer at the stage of Bidding.
19. **Refund of EMD:** The Earnest Money of all the unsuccessful Tenderers, deposited online, shall be refunded in accordance with the Memorandum of the **Finance Department vide No. 3975-F(Y) dated 28th July, 2016. (Refer - in Bidders Guideline/Instruction to Bidders).**
20. Prospective applicants are advised to note carefully the minimum qualification criteria as mentioned in 'Instructions to Bidders' (ITB) and various conditions in "Conditions of Contract", "Special Terms & Conditions" & other bidding documents before tendering the bids.
21. No Conditional/ Incomplete tender will be accepted under any circumstances.
22. 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.  
or  
The notifications thereof or any other laws relating thereto and the rules made and order issued thereunder from time to time pursuant to **Clause 3** of "Conditions of Contract".
23. **Guiding schedule of rates:** : Schedule of rates of P.W.D.(W.B) schedule of Rates(Road and Bridge works) 2018 effective from 30.08.2018(for Road works), along with corrigendum's(up to 9th corrigendum-Road and Bridge works) of P.W.D(W.B) schedule-2018 will be applicable on the date of issue of this notice. Rate of items which are not available in above Schedule of Rates has been derived by proper analysis of rate based on market price.
24. In case of ascertaining the authority of the intending bidders at any stage of tender process or execution of work, necessary registered irrevocable power of attorney in original is to be produced for verification as and when asked for by the Tender Inviting & Accepting Authority / Engineer -in-Charge.
25. 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 be allowed to participate in the tender and that application will be out rightly rejected without any prejudice. The Tender Inviting Authority 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.
26. In case if there be any objection regarding Prequalifying the Agency, that should be lodged to the Chairman, Tender Evaluation Committee within 48 hours from the date of publication of list of qualified Bidders and beyond that time schedule no objection will be entertained by the Tender Evaluation Committee.
27. During the process of scrutiny of tender document, the tender inviting authority or his authorized

representative may verify the credential and other related documents as submitted by the Bidders with the original, if necessary. After verification, if it is found that the documents submitted by the Bidders is either manufactured or false, the bid submitted by the Bidder will be summarily rejected and the Earnest Money deposited by the bidder will be forfeited by the Tender Inviting Authority without assigning any reason thereof.

28. The set of Tender/Bidding Documents comprises the documents listed below :

- i) Notice Inviting Tender with all addenda & corrigendum, if any.
- ii) Instruction to Bidders (Section-1),
- iii) Filled up forms of Qualification Information (Section- 2),
- iv) Printed WBHB Tender Form,
- v) Special Terms & Conditions (Section-3),
- vi) Contract Data (Section-4),
- vii) Technical Specification (Section-5),
- viii) Drawings, if any (Section-6),
- ix) Bill of Quantities (BOQ),
- x) Contractor's Bid (Documents furnished by Contractor),

29. The documents forming the Contract shall be interpreted in the following order of priority :

- i) Agreement,
- ii) Letter of Acceptance, Notice to proceed with the work (i.e. Work Order),
- iii) Contractor's Bid,
- iv) Contract Data,
- v) Printed WBHB Tender Form including Special Terms & Conditions,
- vi) Technical Specifications,
- vii) Drawings,
- viii) Bill of Quantities(BOQ),

30. **Qualification criteria.**

The tender inviting & Accepting Authority through a 'Tender Evaluation Committee' 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 and the declaration executed through prescribed affidavit in non-judicial stamp paper of appropriate value duly notarized.. If any document submitted by a bidder is found either manufactured or false, in such cases the eligibility of the bidder/ tenderer will be out rightly rejected at any stage without any prejudice with forfeiture of earnest money forthwith or will be debarred from participation in any tender within the jurisdiction of WBHB for a period of 1 (one) year or more as deemed fit by the Tender Inviting authority.

31. "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 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, uploading such tender. The power of attorney shall have to be registered in accordance with the provisions of the Registration Act, 1998".

32. Prevailing safety norms has to be followed so that LTI (Loss of time due to injury) is zero.

During construction and till completion of the project, the agency shall have to abide by all rules and regulations of Department of Environment, Govt. of West Bengal to keep pollution under



control due to constructional activities. The contractor shall give all notices in this respect and pay all fees required to be given or paid by any statute or any regulation or by law and any local or other statutory authority which may be applicable to the works and shall keep the Department indemnified against all penalties and liability of every kinds for breach of such statute regulation or law. The following measures shall have to be taken during constructional activities.

- a) Provision of drinking water, waste water disposal and solid waste management system for labour camps should be ensured. Proper sanitation facility should be provided for construction workers. Health and safety of the workers should be ensured during Construction and personal protective equipment like helmets, gloves, shoes, eye protective equipment for welders, etc. should be provided to the workers.
  - b) 15 m screen and adequate sprinkler arrangement shall be provided to arrest the dust particles of the materials being used for the construction purpose. Care should be taken to keep all material storages adequately covered and contained so that they are not exposed to winds and not created any adverse effects on neighbouring communities.
  - c) Diesel Generator sets deployed during construction phase should have acoustic enclosures and should conform to E(P) Rules prescribed for air and noise emission standards.
  - d) Vehicles / equipment deployed during construction phase should conform to applicable air and noise emission standards.
- e) Ambient noise levels and air quality should conform to residential standards both during day and night, and should be monitored fortnightly.

**Joint Director (EW)-III  
West Bengal Housing Board**

**Memo.No. : 663/1(6)/JD(EW)-III/HB**

**Date:- 27.01.2021**

**Copy forwarded for information & wide circulation to the :-**

1. Vice-Chairman, HRBC, St. Georges Gate Road, Kol.
2. . Chief Engineer, Housing Directorate, Govt. of W.B. N.S.Building, Kol.
- 3 Director General (Operation), KMDA, Unnayan Bhawan Salt Lake,
4. Superintending Engineer (P.W.D), Presidency Circle.-I/New Secretariat Building, Kolkata.
5. Federation of Contractors' Association, West Bengal.
6. Contractors' Association, West Bengal Housing Board.

**Joint Director (EW)-III  
West Bengal Housing Board**

Copy forwarded for kind information to :-

1. Housing Commissioner, WBHB
2. JHC & Secy., WBHB
3. Director (Engg.), WBHB
4. FA-Cum-CAO, WBHB
5. CA-Cum-AP, WBHB
6. JD(EW)-II/(EEW), WBHB
7. L.A.O./ASC-I, WBHB with the request to publish the Notice in BOARD's Website.
8. DD(EW)-SKH.P, WBHB
9. DD(EP)-III
9. Estimator of JD(EW)-III, WBHB.

**Joint Director (EW)-III  
West Bengal Housing Board.**

# WEST BENGAL HOUSING BOARD

## SECTION - 1

### INSTRUCTION TO BIDDERS

#### General guidance for e-tendering

Instruction/Guidelines for tenders for electronic submission of the tenders online have been annexed for assisting the contractors to participate in e-Tendering.

1. Registration of bidder

Any bidder willing to take part in the process of e-Tendering will have to be enrolled and registered with the Government system through log In on to <https://etender.wb.nic.in> (or on the web portal of West Bengal Housing Board). The contractor is to click on the link for e-Tendering site as given on the web portal.

2. Digital Signature Certificate (DSC)

Each bidder is required to obtain a class-II or class-III Digital Signature Certificate (DSC) for submission of tenders from the approved service provider of the National Informatics Centre (NIC) on payment of requisite amount. Details are available at the website stated in clause-1 above. DSC is given as a USB e-Token.

3. Collection of Tender Documents

The Bidder can search & download NIT and bid documents electronically from computer once he logs on to the website mentioned above using the Digital Signature Certificate. This is the only mode of collection of tender documents.

4. Participation in more than one work

A prospective bidder shall be allowed to participate in the 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.

5. Submission of Bids

Bids are to be submitted through online to the website stated in Cl. 1 in two folders at a time for each work, one in Technical Proposal & the other in Financial Proposal before the prescribed date & time using the Digital Signature Certificate (DSC). The documents are to be uploaded virus scanned copy duly Digitally Signed. The documents will get encrypted (transformed into non readable formats).

**A. Technical proposal**

**The Technical proposal should contain scanned copies of the following to be uploaded duly Digitally Signed in TECH\_Folder** (except NIT, WBHB Tender Form & Special Terms and condition, to be uploaded duly Digitally Signed in the respective folder)

**A-1. Statutory Cover Containing**

- i. Prequalification Application as per format given in **Sec-2, Form – I**(Qualification Information).
- ii. Copy of challan generated through e-tender portal towards earnest money (EMD) as prescribed in the NIT.
- iii. Financial Statement as per format given in **Sec-2, Form – II**(Qualification

Information).

- iv. Affidavits (Ref:- format shown in “X” Section-2 and format for general affidavit shown in “Y” Section-2.
- v. Printed Tender Form of WBHB, NIT with all agenda & corrigendum and Instruction to Bidders (Section-1) to be uploaded duly Digitally Signed. ( Rate is to be quoted only in the B.O.Q. under Financial Bid. In case of quoting of any rate in Printed Tender Form, the tender will be summarily rejected).
- vi. “Qualification Information” as per format given in Section-2(Appendix-A, B, C & D), “Special Terms & conditions”(Section-3), “Contract Data”(Section-4) and “Technical Specifications” (Section-5) and “Drawings”(Section-6) of the work.

**A-2. Non statutory Cover Containing**

- i. Professional Tax(PT) deposit receipt challan for latest year, PAN Card, Voter ID Card, IT Return / Saral for the Assessment year 2019-20, and GST. Registration No.
- ii. Provident Fund Enrolment No.
- iii. Registration Certificate under Company Act. (if any).
- iii. Registered Deed of partnership Firm/ Article of Association and Memorandum.
- iv. Power of Attorney (For Partnership Firm/ Private Limited Company, if any)
- v. Balance Sheet and Profit & Loss A/c for the last three years(year just preceding the current Financial Year will be considered as year-I).
- vi. List of technical staff along with structure and organization (Section – 2, **Form – III & IV**).
- vii. List of machineries possessed by own/arranged through lease deed along with authenticated copy of invoice, challan , waybill, etc etc. as per format given in Section –2, **Form V(If challan / waybill is not available then at the time of tendering they can produced** Notarised Declaration of the said machineries) .
- viii. Credential for completion of at least one similar nature of work under the authority of state/ central Govt., Statutory Bodies under State/Central Govt. constituted under the statute of the state/ state Govt. having a magnitude of **40(Forty) percent** of the Estimated amount put to tender during the last 5(five) years prior to the date of issue of this NIT is to be furnished Or intending tenders should produced credentials of 2 (Two) similar nature of work, each of the minimum value of 30% of the estimated amount put to tender during 5 (Five) years period to the date of issue of the tender notice, or Intending tenderes should produced credentials of one single running work of similar nature which has been completed to the extent of 80% or more and value of which is not less than the decided value at i) above. In case of running works, only those tenderers who will submit the certificate of satisfactory running works 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 panel action has been initiated against the executed agency i.e. the tenderer. .  
**(Section – 2, Form – VI)**. Scanned copy of Original Credential Certificate as stated in 3(i) of NIT is to be furnished.

- N.B. 1) Credential/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) Reason for abnormal delay, if any (g) Final bill amount .  
2)Credential certificate issued by the Executive Engineer or equivalent competent authority of a state/ central Govt, state / Central Govt, undertaking, statutory, autonomous bodies constituted under the statute of the Central / state Govt. On the executed value of work will only be taken as credential. 3) Payment Certificate will not be treated as credential

**Note: - Failure of submission of any of the above mentioned documents (as stated in A1 and A2)**

**will render the tender liable to be summarily rejected for both statutory and non statutory cover.**

**THE ABOVE STATED NON-STATUTORY TECHNICAL DOCUMENTS SHOULD BE ARRANGED IN THE FOLLOWING MANNER : Scanned copies of original should up load in the folder marked as. TECH\_**

Sl. No.	Category Name	Sub-Category Description	Detail(s)
A	Certificate(s)	Certificate(s)	1. GST Registration Certificate. 2. PAN, Voter ID Card 3. Latest P. Tax (Challan) 4. Latest IT Return/ Saral for AY 2019-20 5. Provident Fund Enrolment No.
B	Company Detail(s)	Company Detail - 1	1. Proprietorship Firm (Trade License) 2. Partnership Firm (Partnership Deed, Trade License) 3. Limited Company (Incorporation Certificate, Trade License) 4. Society (Society Registration Copy, Trade License)
			5. Power of Attorney.
C	Credential	Credential – 1 Credential – 2	1. Similar nature of work done & completion certificate which is applicable for eligibility in this tender. 2. Enlistment certificate issue by WBHB (if required).
D	Equipment	Machineries – 1 Machineries – 2 Laboratory Equipment	1. Original document of own possession / arranged through lease deed to be annexed. Authenticated copy of Invoice Challan & Waybill (machinery) <b>(If challan / waybill is not available then at the time of tendering they can produced</b> Notarised Declaration of the said machineries.
E	Man Power	Technical Personnel	List of Technical Staffs to be deployed along with Structures & Organization (as per N.I.T.)
F	Financial Information	Work in hand	1. Financial Statement (Section – '2', Form – II) duly filled up with bid capacity. 2. Affidavits – X and Affidavits - Y. 3. Certificate of revolving line of credit by the Bank.
		P & L A/c.and Balance Sheet for the FY 2019-20	P & L A/c. and Balance Sheet
		P & L A/c.and Balance Sheet for the FY 2018-19	P & L A/c. and Balance Sheet
		P & L A/c.and Balance Sheet for the FY 2017-18	P & L A/c. and Balance Sheet

**B. Tender Evaluation committee (TEC)**

**i. Opening and evaluation of tender :-**

- If any tenderer is exempted from payment of EMD, copy of relevant order needs to be furnished.
- ii. Technical proposals will be opened jointly by The Joint Director(EW)II and any other Engineer Officer(s) of WBHB (holding DSC) electronically from the web site using their Digital Signature Certificate.
- iii. Intending tenderers may remain present, if they so desire.
- iv. If there is any deficiency in the statutory documents, the tender will summarily be rejected.
- v. Decrypted (transformed into readable formats) documents of the non-statutory cover will be downloaded and handed over to the Tender Evaluation Committee.
- vi. Bid opening summary of the Technical Bid is then uploaded to send email to all the participating Bidders.
- vii. Pursuant to scrutiny and decision of the Tender Evaluation Committee, the summary list of Qualified & Non-qualified Bidders for the work (mentioning the serial number) will be uploaded in the web portals.
- viii. While evaluation, the committee may summon the tenderers and seek clarification / information or additional documents or original hard copy of any of the documents already submitted and if these are not produced within the stipulated time frame, their proposals will be liable for rejection.

**C. Financial proposal**

- i. The financial proposal should contain the following documents in one cover (folder) i.e. Bill of quantities (BOQ), the contractor is to quote the rate (percentage Above/ Below/ At par) online through computer in the space marked for quoting rate in the BOQ.
  - ii. Only downloaded copies of the above documents are to be uploaded virus scanned and Digitally Signed by the contractor.
6. Financial capacity of a tenderer will be judged on the basis of working capital and available bid capacity as mentioned in the N.I.T. and to be derived from the information furnished in FORM-I and II (Section-2) i.e., Application (for Pre-qualification) and Financial Statement. If an applicant feels that his/their Working Capital beyond own resource may be insufficient, he/they may include with the application a letter of guarantee issued by a Scheduled Bank to supplement the applicant. This letter of guarantee should be addressed to the Tender Inviting/ Accepting Authority and should guarantee duly specifying the name of the project that in case of contract is awarded to the Tenderer, the Tenderer will be provided with a revolving line of credit. Such revolving line of credit should be maintained until the works are taken over by the Engineer-In-Charge/ Employer.

The audited Balance sheet for the last three years, net worth bid capacity etc. are to be submitted which must demonstrate the soundness of Tenderer's financial position, showing long term profitability including an estimated financial projection of the next two years.

7. **Penalty for suppression / distortion of facts**

Submission of false document by tenderer is strictly prohibited and in case of such act by the tenderer the same may be referred to the appropriate authority for prosecution as per relevant IT Act with forfeiture of earnest money forthwith.

8. **REJECTION OF BID**

The Employer (tender accepting authority) reserves the right to accept or reject any Bid and to cancel the Bidding processes and reject all Bids at any time prior to the award of Contract without thereby incurring any liability to the affected Tenderer or Tenderers or any obligation to inform the affected Tenderer or Tenderers of the ground for Employer's (tender accepting authority) action.

9) **Opening of Financial Bid**

- a) Financial proposals will be opened by the Joint Director(EW)-III along with other authorised Engineer Officer(s) of WBHB electronically as per schedule date, time place.
- b) After opening of Financial Bid if situation demands, the Joint Director(EW)III/ WBHB may call off-line open Bid among the Bidders to lower down the offer rate further.

10) **Award of Contract**

The Tenderer whose Bid has been accepted will be notified by the Tender Inviting and Accepting Authority through acceptance letter/ Letter of Acceptance. The Letter of Acceptance will constitute the formation of the Contract. The Agreement in Printed Tender Form will incorporate all necessary documents e.g. LOA, N.I.T. with all addenda-corrigendum, Instruction to Bidders(Section-1), different filled-up forms (Section –2), special terms and condition (Section – 3), Contract Data (Section-4), Technical Specifications (Section-5) Contractor's Bid & B.O.Q. and the same will be executed between the Tender Accepting Authority and the successful Tenderer.

- 11) Throughout these bidding documents, the terms 'bid' and 'tender' and their derivatives (bidder/tender, bid/tender, bidding/tendering, etc.) are synonymous.

**Joint Director(EW)-III  
West Bengal Housing Board.**

# WEST BENGAL HOUSING BOARD

## SECTION – 2

### QUALIFICATION INFORMATION

#### FORM - I

#### PRE-QUALIFICATION APPLICATION

To  
The Joint Director (EW)-III  
West Bengal Housing Board.

Ref:- Tender for ..... (Name of work)

.....  
.....  
..... [N.I.T. No \_\_\_\_\_]

Dear Sir,

Having examined the Statutory, Non statutory and NIT documents, I /we hereby submit all the necessary information and relevant documents for evaluation.

The application is made by me / us on behalf of ..... In the capacity..... duly authorized to submit the same.

The necessary evidence admissible by law in respect of authority assigned to us on behalf of the group of firms for Application and for completion of the contract documents is attached herewith.

We are interested in bidding for the works given in Enclosure to this letter.

We understand that:

- (a) Tender Inviting & Accepting Authority can amend the scope & value of the contract bid under this project.
- (b) Tender Inviting & Accepting Authority reserves the right to reject any application without assigning any reason;

**Encl:- e-Filling:**

- 1. Statutory documents.
- 2. Non statutory documents.

**Signature of applicant including title  
and capacity in which application is made**

Date:-



**SECTION – 2**  
**Form - II FINANCIAL**  
**STATEMENT**

Information of audited financial statements for the last year to demonstrate the current soundness of the Bidder's financial position:

1. The Bidder's Net Worth for the last year Calculated on the basis of Capital, profit and free reserved available to the firm should be positive.
2. Bidder's, who meet the minimum qualification criteria, will be qualified only if their available bid capacity at the expected time of bidding is more than the total estimated cost of the works. The available bid capacity will be calculated as under:

Assessed Available Bid capacity = (A x N x 2 - B) where

A= Maximum value of engineering works in respect of Projects executed in any one year during the last five years (updated to the price level of the year indicated in table below under note) taking into account the completed as well as works in progress. The projects include turnkey project/item rate contract/Construction works.

N= Number of years (i.e.year) prescribed for completion of the works for which bids are invited (Less than 6 months will be treated as half year).

B= Financial Liability of the bidder to be incurred for existing commitments and on-going works during the period of the subject contract.

**To Calculate the value of "A"**

i) A table containing value of Engineering works in respect to Projects (Turnkey projects/item rate contract /Construction works) undertaken by the bidder during the last 5 years is as follows:

Sl. No.	Year	Value of Engineering Works Undertaken w.r.t. projects (Rs. In Lakh)
1.	Year - 5	
2.	Year - 4	
3.	Year - 3	
4.	Year - 2	
5.	Year - 1	

ii) Maximum value of projects that have been undertaken during the F.Y. .... out of the last 5 years and value thereof is Rs. .... Lakh (Rupees.....). Further, value updated to the price level of the year indicated in Table is as follows:

Rs. .... Lakh X ..... (Updation factor as per table annexed) = Rs. .... Lakh (Rupees .....).

**Table indicating The factor for the year for updating to the price level is indicated as under :**

Sl. No.	F.Y./Calendar year	Updating factor
1.	Year - 1	1.00
2.	Year - 2	1.05
3.	Year - 3	1.10
4.	Year - 4	1.15
5.	Year - 5	1.20

iii) Net worth for the last year of ..... (name of the company) is ----- .

\_\_\_\_\_

\_\_\_\_\_

(Signature, Name & Designation of Authorised Signatory)  For & on behalf of ----- -(Name of Applicant).
--

Name of the Statutory Auditors Firm :  Seal of the Audit Firm :  (Signature, Name, Designation and Membership No. of authorised signatory).
---

**To calculate the value of “B”**

3. A table containing value of all the existing Commitments and on-going workings to be completed during the next ..... years (prescribed time for completion of the works for which Bids are invited) is as follows:

Sl. No.	Name of Work / project	Name of Employer	%age of Participa- tion of Bidder in the work/ Project	Stipulated dates of start & comple- tion	Value of Contract as per agree- ment (Rs.)	Value of Work com- pleted (Rs)	Balance value of work to be com- pleted (Rs.)	Antici- pated date of Com- pletion	Financial Liability to be incurred for the said work / project during the period of the subject contract (Rs.)
1	2	3	4	5	6	7	8	9	10

.....  
 .....  
 Signature, name and designation of  
 Authorised Signatory

For and on behalf of  
 .....(Name of the  
 Applicant)

**SECTION – 2**  
**AFFIDAVIT – “X”**

(To be furnished in Non – Judicial Stamp paper  
of appropriate value duly notarized)

Work in progress				Work order issued but work not started		
Sl. No.	Name of the work with Tender No. and Tender Inviting Authority	Tendered Amount	% of work executed	Sl. No.	Name of the work with Tender No. and Tender Inviting Authority	Tendered Amount

Date \_\_\_\_\_

Signature of applicant including title  
and capacity in which application is made.

**SECTION - 2**

**AFFIDAVIT – “Y”**

**(To be furnished in Non – Judicial  
Stamp paper of appropriate value  
duly notarized)**

1. I, the under-signed do certify that all the statements made in the attached documents are true and correct. In case of any information submitted is proved to be false or concealed, the application may be rejected for which no objection/claim will be raised by the under-signed.
2. The under-signed also hereby certifies that neither our firm M/S \_\_\_\_\_ nor any of constituent partner had been debarred to participate in tender by the Department (WBHB) during the last 5 (five) years prior to the date of this NIT.
3. The under-signed would authorize and request any Bank, person, Firm or Corporation to furnish pertinent information as deemed necessary and/or as requested by the Department to verify this statement.
4. The under-signed understands that further qualifying information may be requested by Department and agrees to furnish any such information at the request of The Department.
5. Certified that I have applied for the tender in the capacity of individual/as a partner/P.O.A. holder of a firm and I have not applied severally for the same work.

**Signature of applicant including title  
and capacity in which application is made.**

Date \_\_\_\_\_

**SECTION - 2**

**FORM- III**

**STRUCTURE AND ORGANISATION**

- A.1** Name of applicant :
- A.2** Office Address :
- Telephone No. and Cell Phone No. :
- Fax No. :
- E mail :
- A.3** Details of Bank Accounts
- i) Name of Bank :
- ii) Name of Branch and Address with Phone No. :
- iii) Account No. :
- iv) MICR No. :
- v) IFSC Code :
- A.4** Attach an organization chart showing the structure of the company with names of Key personnel. :
- 

**Note:** Application covers Proprietary Firm, Partnership, Limited Company or Corporation,

**Signature of applicant including title  
and capacity in which application is made.**

Date \_\_\_\_\_

**SECTION – 2**

**FORM – IV**

**LIST OF KEY TECHNICAL PERSONNEL TO BE DEPLOYED IN CONTRACT WORK**

Qualification and experiences of key personnel required for administration and execution of the Contract. Attach biographical data. (Refer cl. 4(iii) of NIT).

<b>Sl. No.</b>	<b>Designation / Position</b>	<b>Name of Personnel</b>	<b>Qualification with year of passing</b>	<b>Total Experience in years</b>	<b>Experience in years in present position</b>

**Signature of applicant including title**  
and capacity in which application is made.

**SECTION - 2**

**FORM - V**

**A. DEPLOYMENT OF MACHINERIES IN THE CONTRACT WORK(in favour of owner / lessee):-**

(Copy of document of own possession / arranged through lease deed to be annexed)

(If engaged before Certificate from E.I.C. to be annexed in respect of anticipated dated of release of Machineries.)

Name of Machine / Instrument	Make	Type	Capacity	Motor / Engine No.	Machine No.	Possession Status		Date of release If Engaged
						Idle	Engaged	
1	2	3	4	5	6	7	8	9

For each item of equipment the application should attach copies of  
(i) Receipt of Delivery, (ii) Road Challan from Factory to delivery spot.

**Signature of applicant including title  
and capacity in which application is made.**

**SECTION - 2**  
**FORM – V (contd...)**

**B. MINIMUM PLANT AND EQUIPMENT TO BE DEPLOYED BY THE CONTRACTOR**

Whereas it is entirely the responsibility of the Contractor to deploy sufficient plant and mechanical equipment to ensure compliance with his obligations under the Contract, the following list is an indicative list of the minimum essential basic holding of plant and mechanical equipment which the tenderer must own / arrange through lease deed.

Sl. No.	TYPE OF EQUIPMENT	CAPACITY	MINIMUM NUMBER REQUIRED
1.	<i>N.B. Owned/Arranged through lease Deed.it is obligatory to execute the Road Bituminous works by using the below mentioned machine unless otherwise mentioned in the tender agreement.</i>		1 No.
2.	Mobile Hot Mix Plant (Light Duty)		1 No.
3.	Road Roller 6 to 10 tonne		1 No.
4.	Other equipments for the work		As per requirement

**Joint Director(EW) III**  
**West Bengal Housing Board.**



**SECTION – 2**

**FORM – VI**

**EXPERIENCE PROFILE**

**Name of the Firm:**

**LIST OF PROJECTS COMPLETED THAT ARE SIMILAR IN NATURE TO THE CONTRACT WORK HAVING MORE THAN 30% OF THE ESTIMATED COST PUT TO TENDER EXECUTED DURING THE LAST FIVE YEARS. Along with running work of similar nature(if any) which has been completed to the extent of 75% or more and value of which is not less than the 25%.**

<i>Name of Employer</i>	<i>Name, Location and nature of work</i>	<i>Contract price in Indian Rs.</i>	<i>Percentage of Participation of company</i>	<i>Stipulated Date of start &amp; Completion of work</i>	<i>Actual Date of start &amp; Completion of the work</i>	<i>Completion Cost</i>	<i>Reasons for delay in completion (if any)</i>

Note: a) Certificate from the Employers to be attached

b) Non-disclosure of any information in the Schedule will result in disqualification of the firm

**Signature of applicant including title and capacity in which application is made**

## **SECTION-2**

### **APPENDIX – A**

#### **DECLARATION BY THE TENDERER**

I/We have inspected the site of work and have made myself/ourselves fully acquainted with local conditions in and around the site of work. I /We have carefully gone through the Notice Inviting Tender and other tender documents mentioned therein along with the drawing attached. I/We have also carefully gone through the 'Priced schedule of Probable Items and Quantities'.

My/Our tender is offered taking due consideration of all factors regarding the local site conditions stated in this Detailed Notice Inviting Tender to complete the proposed construction as per drawings referred to above in all respects.

I/We promise to abide by all the stipulations of the contract documents and carry out and complete the work to the satisfaction of the department.

I/We also agree to procure tools and plants, at my/our cost required for the work.

**Date -----**

**Signature of applicant including title  
and capacity in which application is made**

## SECTION-2

### APPENDIX – B

### BANK CERTIFICATE

(From any Scheduled Bank, if required in terms of clause 6 of ITB, Section-1)

This is to certify that M/s. \_\_\_\_\_ is a reputed company with a good financial standing.

If the contract for the work, namely \_\_\_\_\_  
\_\_\_\_\_ is awarded to the above firm, we shall be able to provide overdraft/credit facilities to the extent of Rs. \_\_\_\_\_ to meet their working capital requirements for executing the above contract during the contract period.

(Signature) Name

of the Bank

Senior Bank Manager

Address of the Ban

**SECTION-2**

**APPENDIX - C**

**UNDERTAKING**

(Cash Flow)

I/we the undersigned do hereby undertake that our firm M/s \_\_\_\_\_ would invest a minimum cash up to 15% of the value of the work during implementation of the Contract.

**Date** -----

**Signature of applicant including title  
and capacity in which application is made**

# WEST BENGAL HOUSING BOARD

## SECTION – 3

### Special Terms & conditions

#### **1.0 General :**

Unless otherwise stipulated in the BOQ or Technical Specification of this Tender, all the works are to be done as per general conditions and general specifications as mentioned either in—

a) Public Works Department Schedule of Rates for Building Works and Sanitary & Plumbing Works in force including up-to-date addenda and corrigenda, if any, issued from competent authority as applicable for the working area of concerned Circle at the time of submission of tender, or in

b) Public Works (Roads) Department Schedule of Rates for Road Works, Bridge & Culvert Works and Carriage, etc. in different district of West Bengal for the working area including up-to-date addenda and corrigenda, if any, issued by the Superintending Engineer, Bridge Planning Circle, and in

**Latest editions of the Indian Standard Specifications and codes of practice.**

For items in Bill of Quantities, specification of which are neither available in this document nor in specification books mentioned above should be followed in accordance with good engineering practices.

#### **2.0 Contract Document**

2.1 **Language and Law** : The language of the Contract and the law governing the Contract are stated in the Contract Data.

2.2 **Priority of Contract Documents** : The documents forming the Contract shall be interpreted in the following order of priority :

- i) Agreement,
- ii) Letter of Acceptance, Notice to proceed with the work (i.e. Work Order),
- iii) Contractor's Bid,
- iv) Contract Data,
- v) Printed WBHB Tender Form including Special Terms & Conditions,
- vi) Technical Specifications,
- vii) Drawings,
- viii) Bill of Quantities(BOQ),

#### **3.0 Engineer-in-Charge and commencement of work :**

The "Engineer-in-Charge"(or 'Engineer') means the Deputy Director(EW), WBHB of the project concerned as named in the Contract Data. The word "Department" or "Board" appearing anywhere in the tender documents means West Bengal Housing Board. The word "approved" appearing anywhere in the documents means approved by the Engineer-in-Charge. In case, the work is transferred to any other Deputy Director, the Deputy Director under whom the work will be executed should be treated as the Engineer-in-Charge. The work shall have to be taken up **within 7(Seven)** days from the date of issue of 'Notice to proceed with the work(i.e. Work Order) or otherwise mentioned therein. Failure to do so will constitute a violation of the contract stipulation as regards of proportionate progress and timely completion of work and the contractor will thereby make himself liable to pay compensation or other penal action as per stipulation of the printed tender form.

#### **4.0 Possession of the Site :**

The Engineer-in-charge will give possession of all parts of the site to the contractor by the site possession date stated in Contract Data. If possession of a part is not given by the date stated in Contract Data, the Employer is deemed to have delayed the start of the relevant activities and this will be Compensation Event.

#### **5.0 Delegation**

5.1 The Engineer(i.e. Engineer-in-charge) may from time to time delegate to the Engineer's Representative / Assistant any of the duties and authorities vested in the Engineers and he may at any time revoke such delegation.

5.2 Any failure of the Engineer's Representative / Assistant to disapprove any work, materials or Plant shall not prejudice the authority of the Engineers to disapprove such work, materials or plant and to give instructions for the rectification thereof.

5.3 If the Contractor questions any communication of the Engineer's Representative / Assistant he may refer the matter to the Engineer who shall confirm, reverse or vary the contents of such communications.

#### **6.0 Co-operation with other agencies and damages and safety of users :**

All works are to be carried out in close co-operation with the Department and other contract or contracts that may be working in the area of work. The work should also be carried out with due regard to the convenience of the road users and occupants of the adjacent locality, if any. All arrangements and programme of work must be adjusted accordingly. All precautions must be taken to guard against chances of injury or accidents to workers, road users, occupants of the adjacent locality etc. The contractor must see that all damages to any property which, in the opinion of the Engineer-in-Charge are due to the negligence of the contractor are promptly rectified by the contractor at his own cost and expenses and according to the direction and satisfaction of the Engineer-in-Charge.

#### **7.0 Personnel :**

The Contractor shall employ the key technical personnel named in the Qualification information declaration / NIT or other technical persons approved by the Engineer-in-charge. The Engineer-in-charge will approve any proposed replacement of technical personnel only if their relevant qualifications and abilities are substantially equal to or better than those of the personnel stated in the Qualification information declaration /NIT.

If the Engineer-in-charge asks the Contractor to remove a person who is a member of the Contractor's staff or his work force stating the reasons, the Contractor shall ensure that the person leaves the Site within seven days and has no further connection with the Works in the Contract.

#### **8.0 Employer's Risks**

The Employer is responsible for the excepted risks which are (a) in so far as they directly affect the execution of the Works in the Employer's country, the risks of war, hostilities, invasion, act of foreign enemies, rebellion, revolution, insurrection or military or usurped power, civil war, riot commotion or disorder (unless restricted to the Contractor's employees), natural calamities and contamination from any nuclear fuel or nuclear waste or radioactive toxic explosive, or (b) a cause due solely to the design of the Works, other than the Contractor's design.

#### **9.0 Contractor's Risks**

All risks of loss of or damage to physical property and of personal injury and death, which arise during and in consequence of the performance of the Contract other than the excepted risks, referred to in clause 8.0 above, are the responsibility of the Contractor.

All risk on account of railway or road carriage or carriage by boat including loss or

damage of vehicles, boats, barges, materials or labour, if any, will have to be borne by the contractor without any extra claim towards department.

**10.0 Authorised Representative of Contractor :**

The contractor shall not assign the agreement or sublet any portion of the work. The contractor, may however, appoint an authorized representative in respect of one or more of the following purpose only.

- a) General day to day management of work.
- b) To attend measurements when taken by the Departmental Officers and sign the records of such measurements in token of acceptance by the contractor.

The selection of the authorised representatives shall be subject to the prior approval of the Engineer-in-Charge concerned and the contractor shall in writing seek such approval of the Engineer-in-Charge giving therein the name of work, Tender No., the Name, Address and the specimen signature of the representative he wants to appoint and the specific purposes as specified here-in-above, which the representative will be authorised for. Even after first approval, the Engineer-in-Charge may issue at any subsequent date, revised directions about such authorised representative and the contractor shall be bound to abide by such directions. The Engineer-in-Charge shall not be bound to assign any reason for his revised directions. Any notice, correspondence etc. issued to the authorised representative or left at his address, will be deemed to have been issued to the contractor.

**11.0 Power of Attorney :**

The Provision of the power of attorney, if any, must be subject to the approval of the Department. Otherwise the Department shall not be bound to take cognizance of such attorney.

**12.0 Transportation arrangement :**

The contractor shall arrange for all means of transport including railways wagons required for carriage and supply of materials and also the materials required for the construction work. The Department may however, at their own discretion grant necessary certificates, if required, for booking of railways wagons etc. But, in case of failure of the department to help the contractor in this respect, the contractor will have to arrange at his own initiative so that progress of work will not hamper and no claim whatever on this ground will be entertained under any circumstances. If railways facilities are not available, the contractor will have to depend on transport of materials by road as necessary to complete the work without claiming any extra payment from department in this regard. The contractor must consider this aspect while quoting rate.

**13.0 Arrangement of Land :**

The contractor will arrange land for installation of his Plants and Machineries, his godown, storeyard, labour camp etc. at his own cost for the execution of the work. Departmental land, if available and if applied for, may be spared for the purpose on usual charges as fixed by the Competent Authority.

**14.0 Use of Government/Board's Land :**

Before using any space in Government/Board's land for any purpose whatsoever, approval of the Engineer-in-charge will be required. Departmental land, if available and if applied for, may be spared for the purpose on usual charges as fixed by the Competent Authority. The contractor shall make his own arrangements for storage of tools, plant, equipments; materials etc. of adequate capacity and shall clear and remove on completion of work any shed, huts etc. which he might have been erected on Government/Board's land. If after such use, the contractor failed to clear the land, Department will arrange to remove those installation and adequate recovery will be made from the dues of the contractor.

**15.0 Contractor's Site Office :**

The contractor shall have an office adjacent to the work as may be approved by the Engineer-in-Charge where all directions and notice of any kind whatsoever, which the Engineer-in-Charge or his

representative may desire to give to the contractor in connection with the contract, may be left or sent by post to such office or delivered to the contractor's authorised agent or representative. For such intimation to the contractor's site office, it shall be deemed to be sufficient enough to be served upon the contractor.

**16.0 Contractor's Godown :**

The contractor must provide suitable godowns for cement and other materials at the site of work. The cement godown is to be sufficient in capacity and it must be water tight with either an elevated floor with proper ventilation arrangement underneath the floor or if solid raised flooring is made, cement is to be stored on bamboo or timber dunnage to the satisfaction of the Engineer-in-Charge. No separate payment will be made for these godowns or for the store yard. Any cement, which is found at the time of use to have been damaged, shall be rejected and must immediately be removed from the site by the contractor as per direction of the Engineer-in-Charge.

**17.0 Water and energy :**

The contractor shall have to arrange on his own cost, required energy for operation of equipments and machineries, for operating of pumping set, illuminating work site, office etc. that may be necessary in difference stages of execution of work. No facility of any sort will be provided for utilization of the departmental sources of energy existing at site of work. Arrangement for obtaining water for the work should also be made by the contractor at his own cost. All cost for getting energy and / or for any purpose whatsoever will have to be borne by the contractor for which no claim will be entertained.

All materials, tools and plants and all labour (skilled and unskilled) including their housing, water supply, sanitation, light, procurement of food for contractors staff and crews, medical aids etc. are to be arranged for by the contractor at his own cost. The cost for transportation of labour, materials and all other incidental items as required for work shall also have to be borne by the Contractor without any extra claim from department.

**18.0 Access Road :**

The Contractor shall provide necessary access roads to the site of work from the nearest public through fare and right of way at his cost unless otherwise provided for in the contract.

**19.0 Site Order Book :**

The contractor shall within seven days of receipt of the order to take up work, supply at his own cost one Site Order Book to Assistant Director Concerned, who is authorised to receive and keep in custody the Site Order Book on behalf of the Engineer-in-Charge. The Site Order Book shall be kept at the site of work under the custody of Assistant Director or his authorised representative. The Site Order Book shall have machine numbered pages in triplicates. Directions or instruction from Departmental officers to be issued to the Contractor will be entered (in triplicate) in the Site Order Book (except when such directions or instructions are given by separate letters). The contractor or his authorised representative shall regularly note the entries made in the Work Order Book and also record thereon the action taken or being taken by him complying with the said directions or instruction on any relevant point relating to the work. The contractor or his authorised representative may take away the triplicate page of the Site Order Book for his own record and guidance.

Cases of supplementary items or of claims may not be entertained unless supported by entries in the Site Order Book or any written order from the Tender Accepting Authority.

The first page of the Site Order Book shall contain the following particulars:

- a) Name of the Work
- b) Reference to contract number
- c) Contractual rate in percentage
- d) Date of opening of the Work Order Book
- e) Name and address of the Contractor
- f) Signature of the Contractor
- g) Name and address of the Authorized representative (if any of the contractor authorized by him)
- h) Specific purpose for which the contractor's representatives is authorized to act on behalf of the Contractor.
- i) Signature of the authorized representative duly attested by the Contractor.
- j) Signature of the Assistant Director concerned.
- K) *DATE OF ACTUAL COMPLETION OF WORK.*
- L) *DATE OF RECORDING FINAL MEASUREMENT.*



Entries in (K) and (L) above shall be filled in on completion of the work and before the Site Order Book is recorded in the office of the Deputy Director.

**20.0 Programme of work :**

Before actual commencement of work the contractor shall submit a programme of construction of work with methodology clearly showing the required materials, men and equipment. The contractor will submit a programme of construction in the pattern of **Bar Chart or Critical Path Method** and a time table divided into four equal periods of progress of work to complete the work within the specific period for approval of the Engineer-In-Charge who reserves the right to make addition, alterations and substitutions to such programme in consultation with the contractor and such approved programme shall be adhered to by the contractor unless the same is subsequently found impracticable in part or full in the opinion of the Engineer-In-Charge and is modified by him. The contractor must pray in writing, showing sufficient reasons therein for modification of programme. The conditions laid down in **clause 2** of the printed tender form regarding the division of total period and progress to work and the time table thereof as provided in the **Contract Data** shall be deemed to have been sufficiently complied with the actual progress of work and does not fall short of the progress laid down in the approved time table for one fourth, half and three fourth of time allowed for the work.

**21.0 Setting out of the work :**

The contractor shall be responsible for the true and perfect setting out of the work and for the correctness of the position, levels, dimensions and alignments of all parts of work, if any rectification or adjustment becomes necessary the contractor shall have to do the same at his own cost according to the direction of the Engineer-in-Charge. During progress of works, if any, error appears or arises in respect of position, level, dimensions or alignment of any part of the work, the contractor shall, at his own cost, rectify such defects to the satisfaction of the Engineer-in-Charge. Any setting out that may be done or checked by either of them shall not in any way relieve the contractor from their responsibility for correctness and rectification thereof.

**22.0 Precautions during works :**

The contractor shall carefully execute the work without disturbing or damaging underground or overhead service utilities viz. Electricity, Telephones, Gas, Water pipes, Sewers etc. In case disturbances of service utilities is found unavoidable the matter should immediately be brought to the notice of the Engineer-in-Charge and necessary precautionary measures as would be directed by the Engineer-in-Charge shall be carried out at the cost and expenses of the contractor. If the service utilities are damaged or disturbed in any way by the contractor during execution of the work, the cost of rectification or restoration of damages as would be fixed by the Engineer-in-Charge concerned will be recovered from the contractor.

**23.0 Safety, Security and Protection of the Environment :**

The Contractor shall, throughout the execution and completion of the Works and the remedying of any defects therein:

- (a) have full regard for the safety of all persons and the works (so far as the same are not completed or occupied by the department),
- (b) provide and maintain at his own cost all lights, guards, fencing, warning signs and watching, when and where necessary or required by the Engineer-in-Charge for the protection of the Works or for the safety and convenience of the public or others,
- (c) take all reasonable steps to protect the environment on and off the Site and to avoid damage or nuisance to persons or to property of the public or others resulting from pollution, noise or other causes arising as a consequence of his methods of operation,
- (d) ensure that all lights provided by the Contractor shall be screened so as not to interfere with any signal light of the railways or with any traffic or signal lights of any local or other authority.

**24.0 Clearing Of Work Site :**

Before starting any work, work site, where necessary, must be properly dressed after cutting clearing all varieties of jungles shrubs, bamboo clusters or any undesirable vegetation from the alignment or site of works. On completion of works all temporary structure or obstruction including some pipes in underground work, if any, must also be removed. All scars of construction shall be obliterated and the whole site shall be left in a clear and neat manner to the satisfaction of the Engineer-In-Charge. Total length (in case of road project) shall be demarcated by proper

chainage along with fixing 200m post as per direction of Engineer-in-Charge on both side of the alignment and Bench Marking at desired locations as per direction of Engineer-in-Charge. No separate payment shall be made for all these works, the cost thereof being deemed to have been included in the rates of various items of works quoted by the contractor in the schedule of probable items of works.

**25.0 Sundry Materials :**

The contractor must erect temporary pillars, master pillars etc. as may be required in suitable places as directed by the Engineer-In-Charge at his own cost before starting and during the work by which the departmental staff will check levels layout different works and fix up alignment and the contractor shall have to maintain and protect the same till completion of the work. All machineries and equipments like Level Machine, Staff, Theodolite etc. and other sundry material like, pegs, strings, nails flakes instruments etc. and also skill labour required for setting out the levels for laying out difference structures and alignment shall also be supplied by the contractor as per direction of Engineer-in-Charge at his own cost without any extra claim towards the department.

**26.0 Covered up works:**

When one item of work is to be covered up by another item of work the latter item shall not be done before the former item has been measured up and has been inspected by the Engineer-in-Charge or Assistant Director, as the authorized representatives of the Engineer-in-Charge and order given by him for proceeding with the latter item of work. If this is not possible for practical reasons, the Sub-Assistant Engineer, if so authorized by the Assistant Director, may do this inspection in respect of minor works and issue order regarding the latter item.

**27.0 Drawings :**

a) The Engineer-in-charge shall supply drawings for all permanent works from time to time to the contractor in duplicate. The contractor shall submit a schedule of requirement of drawings for permanent work, subject to approval of the schedule by the Engineer, well in advance to enable the engineer-in-charge supplying the drawings in time. For temporary and minor works, all design and drawings shall be prepared by the contractor at his own cost and obtain approval from the Engineer-in-charge. Approval by the Engineer-in-charge shall not relieve the contractor of any of his responsibilities under the contract.

b) One set of Contract document including all approved drawings furnished to the Contractor as aforesaid shall be kept by the Contractor at site and same shall be at all reasonable times be available for inspection by the Employer and / or the Engineer-in-charge and by any other person authorized by the Engineer-in-charge in writing.

c) Any deviation from working drawings and engineering drawings that may be required by the exigencies of construction, or otherwise, will in all cases be determined and authorized by the Engineer-in-charge in writing.

**28.0 Delay due to modification of drawing and design :**

The contractor shall not be entitled for any compensation for any loss due to delays arising out of modification of the drawing, addition and alterations of specifications and such events shall be governed by the provisions of Clause 12 of Printed Tender Form.

**29.0 Tools and Plants :**

All Tools and Plants required for the work will have to be supplied by the Contractor at his own cost; all cost of fuel and stores for proper running of the Tools and Plants must be borne by the Contractor. The minimum plant and mechanical equipments to be owned by the contractor & deployed in the contract work shall be as shown in **Form-V, Section -2.**

**30.0 Equipment for testing of materials at site laboratory:**

All necessary equipment for conducting necessary tests shall be provided at the site laboratory by the Contractor at his own cost. The following minimum laboratory equipments shall be set up at site office laboratory:

- (i) Slump Cone with Tamping Rod 2 Nos.
- (ii) Graduated glass cylinder..... As per requirement
- (iii) Sets of I. S. sieves for coarse aggregate 1 Set.

(iv)	Sets of I.S. sieves for fine aggregate	1 Set.
(v)	Cube moulds size 150mm x 150mm x 150mm.....	10 Nos.
(vi)	Physical balance weight upto 5kg.....	1 No.
(vii)	Measuring Jars 100ml, 200ml, 500ml.....	... 2 Nos. each size.
(viii)	Water testing Kit.....	1 Nos.

Any other equipment for site tests as required and as directed by the Engineer-in-charge.

**31.0 Procurement of materials :**

All materials required to complete execution of the work shall be supplied by the contractor after procurement from authorised and approved source.

**32.0 Issue of Departmental Materials :**

Departmental materials will not be issued under any circumstances.

**33.0 Serviceable Materials :**

The responsibility for stacking the serviceable materials (as per decision of the Engineer-in-Charge) obtained during dismantling of existing structures/roads and handing over the same to the Engineer-in-charge of work of this Department lies with the contractor and nothing will be paid on this account. In case of any loss or damage of serviceable materials prior to handing over the same to this Department, full value will be recovered from the Contractor's bill at rates as will be assessed by the Engineer-in-Charge.

**34.0 Unserviceable Materials:**

The Contractor shall remove all unserviceable materials, obtained during execution at place as directed. The contractor shall dress up and clear the work site after completion of work as per direction of the Engineer-in-Charge. No extra payment will be made on this account.

**35.0 Damaged / Unused Materials :**

Any damaged / unused materials lying at contractor's custody, which is found at the time of use to have been damaged and / or remaining unused, shall be rejected and / or removed immediately from the site by the contractor or disposed of as directed by Engineer-in-Charge at the costs and expenses of the contractor and the contractor shall have no claim for compensation on account of any such materials so damaged / remaining unused as aforesaid.

**36.0 Idle labour and additional cost :**

Whatever may be the reason **no** claim on idle labour, enhancement of labour rate additional establishment cost, cost of Toll and hire and labour charges of tools and plants, railway freight etc. would be entertained under any circumstances.

**37.0 Timely completion of work :**

All the supply and the work must have to be completed in all respects within the time specified in Notice Inviting Tender from the date of commencement as mentioned in work order. Time for completion as specified in the tender shall be deemed to be the essence of the contract.

**38.0 Extension of time :**

For cogent reasons over which the contractor will have no control and which will retard the progress, extension of time for the period lost will be granted on receipt of application from the contractor. No claim whatsoever for idle labour, additional establishment, enhanced cost of materials and labour and hire charges of tools and plants etc. would be entertained under any circumstances. The contractor should consider the above factor while quoting his rate. Applications for such extension of time should be submitted by the contractor in the manner indicated in Clause-5 of the printed form of Printed Tender Form.

**39.0 Terms and Conditions in extended period :**

As Clause 5 of Printed Tender Form as the case may be when an extension of time for completion of work is granted by the Engineer-in-Charge for cogent reasons for which the contractor have no control, it will be taken for granted by the working contractor that the validity of the contract is extended automatically upto the extended period with all terms and conditions, rates etc. remaining unaltered, i.e. the tender is revalidated upto the extended period.

**40.0 Management Meetings :**

a) Either the Engineer or the Contractor may require the other to attend a management meeting. The business of a management meeting shall be to review the plans for remaining work and to deal with matters in accordance with the requirements in consultation with the concerned persons.

b) The Engineer-in-charge shall record the business of management meetings and is to provide copies of the record to those attending the meeting and to the Employer. The responsibility of the parties for actions to be taken shall be decided by the Engineer either at the management meeting or after the management meeting and stated in writing to all who attended the meeting..

**41.0 Taking over Certificate :**

When the whole of the Works have been completed and have satisfactorily passed any Tests on Completion prescribed by the Contract, the Contractor may give a notice to that effect to the Engineer-in-charge, with a copy to the Employer, accompanied by a written undertaking to finish with due expedition any outstanding work during the Defects Liability Period. Such notice and undertaking shall be deemed to be a request by the Contractor for the Engineer-in-charge to issue a Taking-Over Certificate in respect of the Works. The Engineer-in-charge shall, within 21 days of the date of delivery of such notice, either issue to the Contractor, with a copy to the Employer, a Taking-over Certificate, stating the date on which, in his opinion, the works were substantially completed in accordance with the contract, or give instructions in writing to the Contractor specifying all the work which, in the Engineer's opinion, is required and shall also notify the Contractor of any defects in the Works affecting substantial completion that may appear after such instructions and before completion of the Works specified therein. The Contractor shall be entitled to receive such Taking-Over Certificate within 21 days of completion, to the satisfaction of the Engineer-in-charge, of the works so specified and remedying any defects so notified.

**42.0 Testing of qualities of materials and workmanship :**

All materials and workmanship shall be in accordance with the specifications laid down in the contract and also as per relevant IS codes and the Engineer-In-Charge reserves the right to test, examine and measure the materials/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. Besides this, he will carry out tests from outside Laboratory as per instruction of Engineer-in-Charge. The cost of all such tests shall be borne by the agency in accordance with Clause 18 of Printed Tender Form and hence the same must be considered at the time of quoting rate.

**43.0 Approval of Sample :**

Samples of all materials to be supplied by the contractor and to be used in the work shall have to be approved by the Engineer-in-Charge and checking the quality of such materials shall have to be done by the concerned Department or as directed by Engineer-in-Charge prior to utilization in the work.

**44.0 Rejection of materials :**

All materials brought to the site must be approved by the Engineer-In-Charge. Rejected materials must be removed by the Contractor from the site within 24 hours of the issue of order to that effect. In case of non-compliance of such order, the Engineer-In-Charge shall have the authority to cause such removal at the cost and expense of the contractor and the contractor shall not be entitled to claim for any loss or damage of that account.

**45.0 Defect Liability Period and Defect Liability Certificate :**

The defect liability period shall mean the period of **3(Three) years** (as specified in Clause 17 of Printed WBHB Tender Form) calculated from the date of issue of taking over certificate / certificate of completion of work (whichever is later) for whole of the works comprised in the contract. The contract shall not be considered as completed until a defect liability certificate shall have been signed by the engineer-in-charge and delivered to the employer with a copy to the contractor, stating the date on which the contractor shall have completed his obligations to execute and complete the works and remedy any defects therein to the satisfaction of the Engineer-in-charge.

**46.0 Liquidated Damages / Compensation for Delay :**

The time allowed for carrying out the work as entered in the tender shall be strictly observed by the contractor and shall be reckoned from the date of notice to commence work. The work shall throughout the stipulated period of the contract be proceeded with all due diligence (time being deemed to be of the essence of the contract on the part of the contractor). The contractor shall commence works within **7 (seven) days** from the date of Notice to commence work i. e. Work-order (or as specified therein) and ensure good progress conforming to the milestones achievement of the programme as stated in 'Contract Data'.

If the contractor fails to comply to achieve the milestones of targets stated in Contract Data within specified time period, for such default or delay in execution, the contractor shall be liable to pay as Liquidated Damages/ Compensation for delay as specified in clause 2 of the Conditions of Contract in WBHB Tender Form.

**47.0 Tender Rate :**

The contractor should note that the tender is strictly based on the rates quoted by the Contractor on the priced schedule of probable item of work. The quantities for various other items of works as shown in the priced schedule of probable items of works are based on the drawing and design prepared by the Department. If variations become necessary due to design consideration and as per actual site conditions, those have to be done by the contractor at the time of execution at the rate prescribed in the tender condition. **No conditional rate will be allowed in any case.**

**48.0 Incidental and other charges :**

The cost of all materials, hire charges to Tools and plants, labour, Corporation/Municipal Fees for water supply, Royalty or road materials (if any), electricity and other charges of Municipalities or statutory local bodies, ferry charges, Toll charges, loading and unloading charges, handling charges, overhead charges etc. will be deemed to have been covered by the rates quoted by the contractor inclusive of also Sales Tax (Central and/or State), Income Tax, Octroi Duty/Terminal Tax, Turnover Tax, VAT etc. All other charges for the execution of the specified work, including supply of materials and related carriage, complete or finished in

all respect upto the entire satisfaction of the Engineer-in-charge of the work. No claim extra claim in this regard beyond the specified rate as per work schedule whatsoever in this respect will be entertained.

**49.0 Charges and fees payable by contractor:**

a) The contractor shall pay all fees required to be given or paid by any statute or any regulation or by-law of any local or other statutory authority which may be applicable to the works and shall keep the department immune against all penalties and liabilities of every kinds for breach of such statute regulation or law.

b) The Contractor shall save, harmless and indemnify the department from and against all claims, demands, suit and proceedings for or an account of infringement of any patent rights, design, trade mark of name of other protected write in respect of any constructional plant, machine, work, materials, thing or process used for or in connection with works or temporary works or any of them.

**50.0 Implied elements of work in items :**

Except of such items as are included in the Specific Priced Schedule of probable items and approximate quantities no separate charges shall be paid for traffic control measures, shoring, shuttering, dewatering, curing etc. and the rates of respective items of works are to be deemed as inclusive of the same.

**51.0 Supplementary / Additional items of Works :**

Notwithstanding the provisions made in the related printed tender form any item of the work which can be legitimately be considered as not stipulated in the specific price schedule of probable items of work but has become necessary as a reasonable contingent item during actual execution of work will have to be done by the Contractor, if so directed by the Engineer-in-Charge and the rates will be fixed with manner as stated below: -

- (a) Rate of Supplementary items shall be analyzed in the 1<sup>st</sup> instant extended possible from the rates of the allied items of work appearing in the tender schedule.
- (b) Rate of supplementary items shall be analyzed from the rates of the allied items of work appearing in the unified respective Schedule of Rates of Public Works Department of probable items of work forming part of tender document. Rates for the working area enforced at the time of Notice Inviting Tender shall prevail.
- (c) If the rates of the supplementary items cannot be computed even after applications of clauses stated above, the same shall be determined by analysis from market rates of material, labour and carriage cost prevailing at the time of execution of such items work. Profit and overhead charges (both together) at 10% (Ten percent) will be allowed only; the contractual percentage will not be applicable.

Unbalanced market rates shall never be allowed.

Contractual percentage shall only be applicable with regard to the portions of the analysis based on clauses (a) & (b) stated above only.

It may be noted that the cases of supplementary items of claim shall not be entertained unless supported by entries in the Work Order Book or any written order from the tender accepting authority.

The provisions of this clause, in so far as inconsistent with those of clause 12 of Printed Tender Form, shall be deemed to supersede the inconsistent portion of the said clause 12.

**52.0 Payment of Bills :**

52.1 The contractor shall submit a statement in triplicate to the Engineer-in-charge each month (or mutually agreed intervals) in a tabulated form approved by the Engineer showing the amounts to which the contractor considers himself to be entitled up to the end of the month (or date specified by EIC) in respect of :

- (a) Value of Permanent Works executed at the unit rates and prices quoted by him.
- (b) Actual value certified for payment for works executed up to the end of previous month (or date specified by EIC) at unit rates and prices quoted by him.
- (c) Estimated contract value at unit rates and prices quoted by him for the month in question obtained by deducting (b) from (a).
- (d) Complete measurements based on work done as per approved drawings or deviation as per Engineering norms along with quality certification.
- (e) The value of any variation/supplementary works executed up to the end of the month in question less the amount certified in the previous interim payment certificate.
- (f) Amounts to be deducted as repayment to Advance, if any.
- (g) Any other sum to which the contractor may be entitled under the contract.

52.2 The said statement shall be scrutinized by the Engineer-in-charge and approved or amended in such a way that, in the Engineer's opinion, it reflects the amounts due to the Contractor in accordance with the Contract, after deduction, of any sums which may have become due and payable by the Contractor to the Employer. In cases where there is a difference of opinion as to the value of any item, the Engineer's view shall prevail. Within a reasonable time of receipt of the monthly statement, the Engineer shall determine the amounts due to the Contractor and shall issue to the Employer and the Contractor a certificate herein called "Interim Payment Certificate", certifying the amounts due to the Contractor.

52.3 Normally the Engineer shall not be bound to certify the interim payment more than once in a month. The minimum gross bill amount of such interim payment should not be less than 15% of the Contract Value(Tendered Amount).

52.4 Only under valid circumstances more than one payment in a month even if the gross value of the same falls below 15% of the value of contract may be made.

**53.0 Deduction at Source from the contractors' bills :**

**53.01** Labour welfare Cess will be deducted @ 1(one) % of gross bill value as per rule.

**53.02** Income Tax will be deducted from each bill of the contractor as per applicable rate and rules in force.

**53.03.** Sales Tax/ VAT will be deducted from each bill of the contractor as per applicable rate and rules in force.

**53.04.** The whole work will have to be executed as per Departmental drawings available in this connection at the tender rate.

**53.05** In accordance with the West Bengal Taxation Laws (amendment) Ordinance, 1993 amending the West Bengal Finance (Sales Tax) Act, 1994 necessary S.T / VAT will be deducted as per rate in force from the bill in addition to other deduction as per extent rules.

**54.0 Earnest Money (Bid Security) and Security Deposit :**

The amount of Earnest Money @ 2% (two percent) of the Estimated amount put to tender for the work deposited by the successful tenderer shall on issuance of work order be automatically converted into part security money and a balance of 8% of gross amount of each running account bill shall have to be deducted to make it a total 10 % of Contract Value or value of work done (whichever is higher) as security deposit of the work.

The above clause is to be read in conjunction with clause No.1 of "Conditions of Contract".

**55.0 Refund of Security Deposit / Retention Money :**

The security deposit / Retention Money shall be refunded to the contractor in the manner provided in clause 17 of the Conditions of Contract of W BHB Tender Form i.e as furnished herein under:-

(i) **30%** of the security deposit shall be refunded to the contractor on expiry of **one year** after the issuance of certificate of completion/taking over certificate of work;

(ii) Further **30%** of the security deposit shall be refunded to the contractor on expiry of **two years**;

(iii) The balance **40%** of the security deposit shall be refunded to the contractor on expiry of **three years**;

However, on completion of the whole works, the contractor may substitute Retention Money / Security Deposit with an "on demand" Bank Guarantee" in favour of WBHB in the prescribed format.

**56.0 Royalty:**

The Contractor will have to submit the receipt of payment of royalty to the Government for use of sand, stone materials, laterite, Moorum, gravel, etc. to the Engineer-in-Charge before preparation of bill for payment, when they collect the materials directly from the source. If they collect the materials from the uthorised quarry holder or commercial establishment who directly or indirectly pay the royalty to the Government, necessary certificate or cash memo for sale in that respect from them shall have to be produced to the Engineer-in-Charge failing which necessary deduction from the dues of the contractor may be made as fixed by the Engineer-in-Charge.

**57.0 Night Work:**

The contractor shall not ordinarily be allowed to execute the work at night. The contractor may however, have to execute the work at night, if instructed by the Engineer-in-Charge. For true technical or emergent reasons, the work may require to be executed during the night also according to the instruction of the Engineer-in-Charge. In that case the contractor shall have to arrange for separate set of labour with sufficient and satisfactory lighting arrangement for the night work. No extra payment whatsoever in this respect will be made to the contractor.

**Joint Director (EW)-III  
West Bengal Housing Board.**

# WEST BENGAL HOUSING BOARD

## SECTION - 4 **CONTRACT DATA**

1. The Employer is WEST BENGAL HOUSING BOARD  
Represented by - Joint Director (EW)-III  
West Bengal Housing Board.  
Address "ABASAN"  
105, S.N. Banerjee Road. (4 th floor)  
Kolkata-700014 , West Bengal
2. The Engineer-in-Charge is - Deputy Director (EW),  
Shilpakanan Housing Project,  
West Bengal Housing Board.  
Address West Bengal Housing Board,  
105, S.N.Banerjee Road,  
Kolkata-700 014.  
Authorized Representative: - Assistant Director(EW),  
Shilpakanan Housing Project.  
West Bengal Housing Board.  
Address - West Bengal Housing Board,  
105, S.N.Banerjee Road,  
Kolkata-700 014.
3. The Defects Liability Period is 365\*3=1095 days from the date of completion.
4. The Start Date shall be 7 days from the date of issue of 'Notice to proceed with the work' (i.e. Work Order).
5. The Intended Completion Time for the whole of Works is 4(Four) months from date mentioned in the Work Order as per following Milestones:

**Milestone dates:**

**Physical works to be completed**

Milestone 1 i.e. 25%

**Period from the start date**

35% of the stipulated time



<u>Milestone 2 i.e. 50%</u>	65% of the stipulated time
<u>Milestone 3 i.e. 75%</u>	85% of the stipulated time
<u>Milestone 4 i.e. 100%</u>	100% of the stipulated time

6. The Site is located at Shilpakanan Housing Project ,Phase- III, Durgapur, Under West Bengal Housing Board.

7. The name and identification number of the Contract is :

"Repair and Renovation of Bituminous Road at Shilpakanan Housing Project, Phase-III, Durgapur under West Bengal Housing Board".

8. The works shall include the followings as specified or otherwise directed :

**Civil Works :**

Site clearance; setting-out layout for the Land Area Development works comprising of External Water Supply-Sewerage & Drainage Network, Roads & Pathways, Landscaping & Arboriculture etc. maintaining lines and levels as per supplied drawings, all aspects of quality assurance of various components of the works, rectification of the defects in the completed works during the Defects Liability /Security Period, submission of any other related documents; and other item of work as may be required to be carried out for completing the works in accordance with the drawings and provisions of the contract to ensure safety.

**Other Works :**

Any other items as required to fulfill all contractual obligations as per the Bid documents.

9. The following documents shall form part of the Contract:

- i) Letter of Acceptance, Notice to proceed with the work(i.e. work order).
- ii) NIT with all addenda-corrigendum,
- iii) Instruction to Bidders (Section-1)
- iv) Qualification Information(Section-2)
- v) Special Terms & Conditions(Section-3)
- vi) Contract Data (section-4)
- vii) Technical Specification(Section-5)
- viii) Drawings(Section-6)
- ix) Contractor's Bid
- x) Bill of Quantities (BOQ)
- xi) Any other document forming part of the Contract.
- xii) Agreement.

10. The law which applies to the Contract is the law of Union of India.

11. The language of the Contract documents is English

12. The Schedule of Key Personnel as per Form-IV, Section -2.

13. The site possession Dates shall be 7 days from the date of issue of 'Notice to proceed with the work' i.e. Work Order.

14. The period for submission of the work programme for approval of Engineer-in-Charge shall be 7 days from the issue of Letter of Acceptance.

15. The currency of the contract is Indian Rupees.
16. The minimum gross bill amount of interim payment certificate should not be less than 15% of the Contract Value(Tendered Amount).[Cl.52.0/Section3]
17. The proportion of payments retained (retention money/Security Deposit) shall be 8% from each bill subject to a maximum of 10% of final contract price. [Cl.54.0/Section-3]
18. Amount of liquidated damages / compensation for delay in completion of work. : An amount equal to 1% or such smaller amount as decided by the Employer (Joint Director concerned) on the tendered amount of the whole work for delay per day subject to a maximum of 10% of the tendered amount. [Cl.46.0/Section3]

**Joint Director (EW)-III  
West Bengal Housing Board.**

# WEST BENGAL HOUSING BOARD

## SECTION-5

### Technical Specification

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#### **D. 1. General:**

The information given hereafter is without any prejudice. The intending bidders should satisfy themselves regarding the latest conditions of the site and its surroundings by personal check and investigation.

**D. 2. Name of Work:** "Repair and Renovation of Bituminous Road at Shilpakanan Housing Project, Phase-III, Durgapur under West Bengal Housing Board".

#### **D. 3. Location of Work site:**

The Site is located at Shilpakanan Housing Project, Phase- III, Durgapur, Under West Bengal Housing Board.

#### **D. 4 Site Condition :**

The contractor before tendering must visit the site and satisfy himself as to the extent of the proposed construction difficulties and problems, if any, to start, to continue and complete the work within the time as stipulated in this tender without dislocation of normal traffics during day as well as to night. No interruption in works due to any site condition shall be engaged as to complete the work in time. The execution of the work should however be planned and phased so that there are no undue hazards to the movement of normal traffic over the road. No additional payment will be entertained on this account. Difficulties and inconveniences in transporting materials over the bad roads, Kutchra roads, incomplete roads and over the weak and damaged culverts should be taken into consideration by the Contractor. The materials for the work may be required to carry over kutchra roads. These approach roads should be maintained by the Contractor at his own cost.

Difficulties in collection of different materials in lot, over the road flank due to insufficient space if there be, be noted by the bidder. No rate or time will be allowed on these accounts as stated. The bidder should quote his rate taking into consideration regarding security of the materials. Nothing would be entertained under any circumstances beyond the respective tendered provisions.

#### **D. 5. Working condition:**

During execution of work, contractor will remain responsible for providing unhindered passage to traffic on road adjacent to site, providing lighting and guarding arrangement during night for safety and no extra cost will be paid on this account.

Work may be required to be executed at night also. Accordingly sufficient lighting arrangement is to be made by the bidder and the cost of such arrangement shall be deemed to have been included in the rates of relevant items.

It is to be noted that there will not be any electrical facility at work site. Bidder should make his own arrangement for water, necessary power of lighting, welding, running of pumps etc. and the cost for such arrangement shall be deemed to have been included in the rates quoted by the bidder.

Work shall have to be executed in accordance with the rules and regulations in vogue of Government of West Bengal and local Authorities.

#### **D. 6. Specifications:**

Details of Specifications to be followed in the Proposed Construction are given here-in-after in the Price Schedule(BOQ). Unless otherwise stipulated in the BOQ or Technical Specification of this Tender, all the works are to be done as per General Specification of “Schedule of Rates” for Building of Public Works Department, Public Works (Roads) Department, and Latest editions of the Indian Standard Specifications and codes of practice.

#### **D.7. Codes of Practice:**

Latest editions of the Indian Standard Specifications and codes of practice – some of which are mentioned below and as per departmental schedule of rates as mentioned in Sl. No. C. 1. of special terms & conditions of contract of bid documents (Section – 3) are to be followed during execution of the works.

- (i) IS 456 : Code of Practice for plain and reinforced concrete.
- (ii) IS 800 : Code of practice for general construction in steel.
- (iii) IS 2751 : Code of Practice for Welding of Mild Steel Plain and Deformed Bars for Reinforced Concrete Construction.
- (iv) IS 383 : Specification for coarse and fine aggregates for natural sources for concrete..
- (v) IS 432 : Mild steel and medium tensile steel (Part-I) bars and hard drawn steel wire for concrete reinforcement.
- (vi) IS 4990 : Indian Standard Specification for concrete shuttering works.
- (vii) IS 1904 : Code of practice for design and construction of foundations in soils
- (viii) IS 2750 : Specification for Steel Scaffoldings.
- (ix) IS 1161 : Specification for steel tubes for structural purposes.
- (x) IS 3764 : Safety Code for excavation work.
- (xi) IS 2911(pt-I,Sec-2)-1979 : Code of Practice for design and construction of pile foundations concrete piles bored cast- in-situ bored piles.
- (xii) IS 2911 (pt-4) : Load testing of piles.
- (xiii) IS 1200 (pt-XXII) : Method of measurements of piling
- (xiv) IS 5121 : Safety Code for piling & other deep foundations..

#### **D. 8. Detailed Specification:**

##### **D. 8.1. Materials for civil work / structures:**

All materials to be used for structure must be procured, stored and tested before use conforming to respective Clauses of prevailing codes of practice.

##### **D. 8.1.1. Cement:**

Ordinary Portland cement of 53 grade conforming to IS 12269 shall be used.

##### **D. 8.1.2. Coarse aggregate:**

Coarse aggregate shall conform to the specifications laid down in IS 383.

##### **D. 8.1.3. Fine aggregate:**

Fine aggregate shall conform to the specifications laid down in IS 383.

Samples of coarse and fine aggregates proposed to be used by the Contractor must be

deposited with the Engineer-in-Charge for his approval. The Samples shall be fair indications of the general quality and shall be delivered in 3 (three) nos. 450 GMs bottles.

On approval of samples one set will be retained by the Engineer, one set shall be sent to his representative at site of works and the third set shall be returned to the contractor for keeping in his site office. Any consignment which in the opinion of the Engineer-in-Charge does not conform with the approved samples should be, if so directed, immediately removed by the Contractor at his own cost.

**D. 8.1.4. Water:**

Water shall be potable, free from any harmful chemicals or suspended materials.

**D. 8.1.5. Steel Reinforcement:**

All steel reinforcement shall conform to the provisions contained in IS 1786-1987. For reinforced concrete work in any part of the structure the provisions of IS 456-2000 will apply.

**D. 8.1.6. Pre-stressing Steel:**

Pre-stressing steel shall be uncoated stress relieved low relaxation seven ply strand conforming to IS 14268.

**D. 8.1.7. Sheet Pile:**

Sheet Pile shall conform to IS 9527 (Part – 3), IS 2062, IS 2314 - 1983.

**D.8.1.8. Structural Steel work:**

Structural steel shall conform to IS 226.

**D.8.2. Concrete:**

Concrete must be produced and laid conforming to relevant clauses of IS 456. When concrete is specified by strength, it is termed as “Design Mix Concrete” or “Grade of Concrete”. Such concrete is that in which the design of mix. i.e. determination of the proportions of cement, aggregates and water is arrived at to have a Target Mean strength for each grade of concrete.

**D. 8.2.1. Mix Design:**

The Mix design shall be done by the contractor as per IS 10262 (Recommended guide lines for mix design) and I.S. SP-23 (S&T) - 1982 (Hand Book on concrete Mix) and I.S. 383-1970.

However, for guidance it is to be noted that the mix and water cement ratio shall be arrived at after preliminary tests which shall be done as per relevant clause of IS 456.

The Engineer-in-Charge will approve the final design and job mix in accordance with stipulations of IS 456. The Contractor shall stick to the job mix formula approved by the Engineer-in-Charge. However, the same may be modified only with specific written permission of the Engineer-in-Charge.

**D. 8.2.2. Batching Plant:**

Concrete shall be produced in Batching Plant as per provision in the tender. As regards to accuracy of measuring devices, criteria laid down below shall have to be followed:

The accuracy of the measuring devices shall fall within the following limits:

Measurement of Cement  $\pm 3\%$  of the quantity of cement in each batch.

Measurement of Water  $\pm 3\%$  of the quantity of water in each batch.

Measurement of Aggregate  $\pm 3\%$  of the quantity of aggregate in each batch.

Measurement of Admixture  $\pm 3\%$  of the quantity of admixture in each batch.

**D. 8.2.3. Admixture:**

To improve the workability of concrete and cement grout, admixtures conforming to I.S. 6925 and I.S. 9103 may be used on specific written permission of the Superintending Engineer. Admixtures generating Hydrogen, Nitrogen etc. shall not be used. The cost of admixtures and labour for mixing the same shall be deemed to have been included in the rates quoted for respective works.

**D. 8.2.4. Transporting, placing and compacting Concrete:**

Concrete shall be transported from Batching Plant to the work site by transit mixture. The same shall then be poured on to the formwork by concrete pump (except in case of piles). **Relevant clauses of IS 456 shall have to be followed for transporting, placing and compacting concrete.** Unless specially permitted by the Engineer-in-Charge, concrete shall not however, be dropped from a height of more than 1.850 M.

**D. 8.2.5. Construction Joint:**

Concreting shall be carried out continuously upto construction joints, the position and arrangements of which shall be predetermined by the Engineer-in-Charge or his representative. Any intermediate rest/pause shall also be subject to his approval. All construction joints shall have to be provided as per relevant clause of IS 456 – 2000.

**D. 9. Concreting at Night:**

All concreting work should be so programmed as not to necessitate the work at night. If for any reason, this becomes imperative, the contractor shall obtain previous permission of the Engineer-in-Charge or his representative and make proper lighting arrangement to his satisfaction without any extra claim thereof.

**D. 10. Record keeping of Concreting:**

A record showing the proportion, type of batching, type of aggregates used, the time and date of placing concrete and the approximate quantity placed (together with other relevant details) in each portion of the structures shall be kept. This record shall be prepared in duplicate by the contractor in the form and manner to be decided by the Engineer-in-Charge. The Contractor shall submit the record promptly to the Engineer-in-Charge or to his representative who will accept the same after verification and retain one copy, the other copy being retained by the Contractor.

**D. 11. Curing of Concrete:**

Concrete shall be cured properly and protected from any harmful effects. Stipulations of relevant Clauses of IS 456 shall be strictly adhered to.

**D.12. Testing of Concrete for R.C.C. / P.S.C. Works:**

The contractor shall provide all labour, materials and appliances including cube testing machine required to make test specimens for designing concrete mix and testing the quality of concrete going into the job.

Test cube shall be prepared as per IS-1199. 150 mm cubes shall be made, cured & tested at 7 days and at 28 days for compressive strength conforming to IS-516. Strength of concrete at 7 days age can be converted to 28 days as per IS: SP-24.

The contractor shall make all arrangements and do everything necessary for proper making

and curing the test specimen under the direction, supervision and control of the Engineer-in-Charge or his representatives at their cost.

The Engineer-in-Charge or his representative may at any time direct the contractor to make specimen from the concrete actually going into the job. The contractor shall forthwith comply with that direction.

**D. 13. Acceptance Criteria of Concrete:**

Acceptance criteria shall conform to relevant clauses of IS 456.

Where the cube strength falls below the allowable strength specified and the Engineer-in-Charge on the basis of test results is satisfied that the concrete deficient in strength is acceptable, the Engineer-in-Charge shall have full power in his absolute discretion to reduce the rate as a penal measure.

**D. 14. Reduced Rate for under-specified Concrete:**

The contractor shall remain fully liable for producing concrete of specified strength. In case the concrete is found to be acceptable as under-specified work due to deficiency in strength of concrete and is accepted by the Engineer-in-Charge reduction in rate may be applied as under.

$$\text{Percentage reduction} = \frac{\text{Design Strength} - \text{Observed Strength}}{\text{Design Strength}} \times 100$$

If the deficiency in strength of concrete is beyond tolerable limit the Engineer-in-Charge may at his discretion direct the portion of concrete certified by him so deficient in strength to be replaced by concrete of specified strength at the Contractor's cost.

The Engineer-in-Charge may also at his discretion allow deficient concrete to remain but the deduction on account of such deficiency in strength shall be made above.

**D. 15. Additional Tests of Concrete:**

For any substandard concreting due to bad workmanship, honeycombing, bulging etc. and also due to concreting found deficient in strength, the Engineer-in-Charge may conduct additional tests, if required, in the opinion of the Engineer-in-Charge for testing the flexural strength, durability and other required parameters of the concrete on cored samples or on the newly constructed structure. The following are the examples (not exhaustive) of tests. Any number of the tests may be carried out as decided by the Engineer-in-Charge. The contractor shall arrange for the test and bear the cost of the same, as per direction of the Engineer-in-Charge. If the newly constructed concrete structure fails to attain the desired strength, durability and other properties of the concrete by any one of the tests stated in Cl. No. D. 16.1., the Engineer-in-Charge shall have discretion to get the defective portion replaced or rectified at the contractor's cost. In such cases the decision of the Engineer-in-Charge will be final and binding.

**D. 15.1. Non-destructive Test Methods:**

**D. 15.1.1. Surface hardness Tests:**

They include the William's Testing Pistol, Frank Spring Hammer, Einbeck Pendulum hammer.

**D. 15.1.2. Rebound Test:**

Schmidt rebound Hammer.

**D. 15.1.3. Penetration Techniques:**

These include the smitz Hammer, Split Pin and Windsor probe.

**D. 15.1.4. Dynamic or Vibration Tests:**

These include resonant frequency and mechanical sonic and ultrasonic pulse velocity methods. They include the Sonometer, the PUNDIT equipment and ultrasonic pulse velocity measuring equipments.

**D. 15.1.5. Magnetic Methods:**

They include the Pachometer and Covermeter.

**D. 15.1.6. Chemical tests to obtain cement content, Aggregate ratio and grading:**

The above tests shall be carried out by any approved laboratory or firm.

**D. 16. Mode of Measurement for Payment of Concrete:**

Payment shall be made on volume of concrete as per recorded measurement. Cost of cement, stone chips, sand and any admixture, cost of transportation of concrete, and its placement using pumps etc. and any other allied items of work, excluding reinforcement, pre-stressing steel and other accessories shall be deemed to have been included in the rate.

**D. 17. Shuttering:**

Form work must conform to Clause Nos.1501 to 1513 under Section 1500 of specification for road and bridge works – 4<sup>th</sup> revision published by I.R.C. Shuttering shall be of approved type with hard wood timber planks true to line with smooth surface and not less than 37.5 mm thick with 4 mm thick plywood lining over the planks. The plywood shall conform to IS 4990–1993. However, as an alternative, sufficiently rigid steel shuttering may be used, if so desired or approved by the Engineer-in-Charge.

All shuttering and framing must be adequately stayed and braced to the satisfaction of the Engineer-in-Charge for properly supporting the concrete during the period of hardening. It shall be so constructed that it may be removed without shock of vibration to the concrete.

Drawings showing shuttering details together with supporting design calculation in detail should be submitted by the contractor to the Engineer-in-Charge for his approval before taking up the work.

Before concrete is placed, the shuttering must be coated with an approved preparation for preventing the adhesion of the concrete to the shuttering and it is to be of such a nature and so applied that the surface of the finished concrete is not stained. Cares should also be taken that such approved preparation shall be kept out of contact with the reinforcements. The interior of all moulds and boxes must be thoroughly washed with a hose pipe or otherwise so as to be properly cleaned and free from all extraneous matter previous to the deposition of concrete.

***D.17.1 Mode of Measurement for Payment:***

Separate payment shall be made for shuttering, if not otherwise mentioned. Wherever necessary, shuttering and staging must be provided. Unless otherwise stated no payment will be made for such shuttering or staging and the cost thereof will be deemed to have been covered by the rate for relevant finished item of work. Where payment for shuttering has been specified, the rate shall be deemed to cover the cost of the necessary staging as well. Payment if any, for shuttering will be on the basis of surface area of shuttering in actual contact with concrete.

**D. 18. Finishing of Concrete Surface:**

As soon as the shuttering has been removed, the visible surface of the concrete shall be rubbed down to perfectly smooth finish, free from all irregularities. The finish must be produced by using any of the methods specified in the specifications and codes of practice. No separate payment will be made for finishing surfaces.

**D. 19. Steel reinforcement for structure:**



This work shall consist of furnishing and placing reinforcement of the shape and dimensions shown on the drawings and as specified in Clause Nos. 1601 to 1609 under Section 1600 of Specifications for Road and Bridge Works 4th – revision published by IRC.

Generally TMT bars of grade Fe 415 shall be used for the structure.

The Contractor's rate shall include the cost of reinforcements and cost of carriage for steel materials to work site, labour for cutting the bars to correct length, bending cold to shape, placing and fixing in the position as shown in drawing with black annealed wire of approved gauge securely tied at every inter-section or as directed. The contractor shall without extra charge provide all other support and fixing required and shall take precautions that all such temporary fixings are removed before the concrete is put in the mould. The contractor's rate shall also include any initial straightening of the bars if necessary and removing loose rust or scales, if any, and other incidental works in this connection. It should also include the cost of supply of black annealed wire of approved gauge required for tying reinforcement. Cost of spot or running welding as and when provided as per direction of the Engineer-in-Charge for lap splice shall be included in the rate.

**D. 19.1. Mode of Measurement for Payment:**

Payment shall be made on weight of reinforcement steel including quantity for laps and splices.

**D. 20. Earth Work in excavation:**

D. 20.1. Specification laid down in PWD schedule of rates shall be followed.

D. 20.2. Mode of Measurement for Payment:

Payment shall be made on the volume of earth excavated. The rate shall include cost of dumping the excavated earth within a lead of 50 M.

**D. 21. Welding:**

Welding shall conform to the specifications laid down in relevant IS codes of practice.

N.B. Specifications of any item of works not covered here in above shall be guided by the P.W.D. / P.W. (Roads) Directorate's Schedule of Rates in force at the time of N.I.T. and latest edition of relevant Indian Standard Specifications and Codes of Practice. In case of non-availability of item specification in the said Schedule of Rates, the Latest edition of the book of 'Specification for Road and Bridge Works' of the M.O.R.T. & H., or CPWD Specification – 2009, Vol-I & Vol-II will be followed.

**D.21.1 Concreting Materials**

Unless otherwise stated herein all aspects of the concrete work including materials, specifications, preliminary mix designs, workmanship and inspection testing stipulated in specifications of "plain and reinforced concrete" shall apply.

Cement shall be ordinary Portland cement conforming to IS 8112, IS 12269 (for Design mix concrete) unless specified otherwise.

Maximum size of aggregates shall be 20 mm.

Three of the six cubes constituting one test shall be tested on the 7th day from casting the cubes and the remaining three cubes shall be tested on the 28th day after casting.

ENGINEER - IN – CHARGE reserves the right to reject any concrete work of deficient concrete strength. Such rejected concrete shall be replaced by the contractor at his own cost

ENGINEER - IN – CHARGE also reserves the right to order change in the mix

design and/or water cement ratio to obtain the specified strength or workability.

**D.21.2 Reinforcement**

- a) All reinforcement for use in the concrete work shall be as per drawing, duly tested.

**Joint Director (EW)-III  
West Bengal Housing Board.**

-END-