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OFFICE OF THE SUPERINTENDING ENGINEER
WEST BENGAL STATE WAREHOUSING CORPORATION

Memo no. 211/ENGG/SWC/2026-27 Date: 09.10.2026

NOTICE INVITING ELECTRONIC TENDER No- 15 OF 2026-27 OF THE SUPERINTENDING ENGINEER, WEST BENGAL STATE WAREHOUSING CORPORATION

Through Pre-qualification

The SENIOR SUPERINTENDING ENGINEER, *West Bengal State Warehousing Corporation*, invites e-Tender for the work Detailed in the table below. (Submission of Bid through ***online***).

List of schemes:-

Sl. No.	Name of the work	Estimated Amount (Rs.)	Earnest Money (Rs.)	Period of Completion	Defect Liability Period	Name of the Concerned Office	Eligibility of Contractor
1	**Replacement of old damaged roof sheet with new Aluminium alloy sheet at 1000MT godown at Kotulpur RIDF premises in the district of Bankura.**	**13,02,251.00** **(INR Thirteen Lakh Two Thousand Two Hundred Fifty One Only)**	**2.00% of Estimated amount i.e.** **26,045.00**	**90 (Ninety) Days from the date of commencement**	**5years** (as per G.O. No.5784-PW/L & A /2M-175/2017 Dated: 12.09.2017)	**West Bengal State Warehousing Corporation**	**Open Bonafied contractors (through Pre-qualification)**

1.In the event of e-filling, intending bidder shall download the tender documents consisting of this N.I.T., Instruction to Bidders (Section–A) , different Forms & Affidavit (Section-B), Special Terms & Conditions (Section-C),Specification of Work (Section-D), Schedule of Works (BOQ), standard contract form and Addenda & Corrigenda (if any) from the website https://etender.wb.nic.in with the

help of Digital Signature Certificate. .Both Technical Bid and Financial Bid are to be submitted concurrently duly digitally signed in the website https://etender.wb.nic.in

2.

Only online submission of EMD (Earnest Money Deposit)

Through net banking (any of the banks listed in the ICICI bank payment Gateway) In case of payment through ICICI bank payment Gateway, ICICI bank NEFT/RTGS will also be valid as per Memorandum No.3975-F(Y) dated-28/07/2016 of Finance Department, Govt. of WB

Bid/Financial Bid as per Tender time schedule stated in Sl. No. 17.

The documents submitted by the bidders should be properly in indexed & self-attested with seal.

3. The FINANCIAL OFFER of the prospective tenderer will be considered only if the TECHNICAL BID of the tenderer is found qualified by the 'Bid Evaluation Committee(BEC)' formed by Food & Supplies Department Government of West Bengal.

4. The decision of the 'Bid Evaluation Committee' will be final and absolute in this respect. The list of Qualified Bidders will be displayed in the website.

5. **Eligibility criteria for participation in tender:**

i) **(a)** The intending tenderers shall have credentials of a similar nature of completed work of the minimum value of **40% (Forty percent)** of the estimated amount put to tender during 5(five) years prior to the date of issue of the tender notice.

OR

(b) The intending tenderers shall have credentials of 2(two) similar nature of completed works, each of the minimum value of **30% (Thirty percent)** of the estimated amount put to tender during 5(five) years prior to the date of issue of the tender notice.

(c) The intending tenderers shall have credentials 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.e.) above.

N.B. :-

1. ***The credential certificate(s) for completed work(s) should contain:- (a) Name of the work, (b) Name of the Client, (c) Amount put to tender, (d) Schedule month and year of commencement and completion as per work order, (e) Actual month and year of completion, (f) Gross bill amount of the completed work / executed value of running work and the detailed communicational /address of client must be indicated in the Credential Certificate.***

2. ***Credential certificate issued by the EXECUTIVE ENGINEER & equivalent or higher competent authority of a State/ Central Government, State /Central Government undertaking, Statutory/ autonomous bodies constituted under the Central/State statute, on the executed value of completed / running work will be taken as credential.***

~~6.***The prospective Bidder must have one skilled person who have valid Electrical contractors license with Electrical Supervisors' holding Supervisor competency certificate on the applicable parts or equivalent National supervisor's certificate of competency as per central electricity authority(measures relating to safety and electric supply) Regulation 2010 (erstwhile i.e. rules 1956) read with guidelines issues from time to time by directorate of Electricity, Govt. of West Bengal (Mentioned above documents should be uploaded at the time of Bid Submission with authenticated documents in respect of engagement shall be furnished, for the technical evaluation. Without furnishing the part of Supervisor competency the same will not be entertained.) He may be One Electrical Engineering Degree holder or One Electrical Engineering Diploma holder(Authenticated documents in respect of qualification and engagement eg. Appointment letter, consent letter, and Aadhar Card.) Qualification certificate and engagement to the contactor shall have to be furnished for Technical Evaluation. He should be employed on full time basis, may not be a permanent employee of the company.***~~

7.

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

8. The prospective bidders shall have in their full time engagement experienced technical personnel the minimum being (1) One Civil Engineering Diploma holder Qualification certificate and engagement to the contactor shall have to be furnished for Technical Evaluation.)[Non-statutory documents] (If submitted as per cl. 6 then this point is not applicable)

9. Current/latest Income Tax Acknowledgement Receipt, Current P.T. Deposit Challan, Pan Card, GST Registration Certificate, Valid Income Tax return / Professional Tax Clearance Certificate / Professional Tax (Deposit Challan) / valid Trade License / Voter I.D/ Valid 15-digit goods and service taxpayer identification number (GSTIN) under GST Act, 2017(vide memo no 4374-F(Y), dated: 13/07/2017 of Finance Dept. Audit Branch and Current GST Challan, Card for self-identification, Income Tax Acknowledgement Receipt for last five assessment year including current assessment year 2024-25 to be accompanied with the Technical Bid Documents. [Non-statutory documents].

10. 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 through affidavit has to be furnished by the prospective bidders without which the Technical Bid shall be treated as non-responsive.)

~~12. The available Bid capacity (to be calculated on the basis of prescribed format vide Memo.No.45-W(C)/1M-23/15dt.13.02.2015 in Annexure-A) of the prospective applicant shall not be less than the estimated amount put to tender.~~ **All the pages used for**

~~**calculation of Bid Capacity are to be signed by both the Chartered Accountant and the bidder with their Official Seals.**~~

13. In case of Proprietorship and Partnership Firms and Company the Tax Audited Report in 3CD Form or as applicable of last 5 financial years to be furnished along with audited balance sheet and profit and loss account and all schedules forming the part of Balance Sheet and Profit & Loss Account. Tax Audited report, Balance Sheet and Profit & Loss Account including all schedules forming the part of Balance Sheet and Profit & Loss Account should be in favour of applicant. No other name along with applicant name, in such enclose will be entertained. [Non Statutory Documents].

14. The prospective bidders should own or arrange through lease hold agreement (may be procured after the date of publication of NIET)
, the required plant and machineries. Conclusive proof of ownership in favour of owner of plant and machineries in working condition shall have to be submitted. (Details as mentioned in Sl No. 40 and Section–B, Form–IV) the required plant and machineries of prescribed specifications as shown in format. If the machineries have been engaged in other works then name of client along -with his contact no. & e–mail address should be furnished in the declaration by the intended tender and the present location (working place) should also be given with tentative date of release of plant and machineries.
(Ref. Form–IV, Section-B) [Non-statutory documents]

15. Registered Partnership Deed for Partnership Firms to be submitted. The company shall furnish the Article of Association and Memorandum. Where an individual person holds a digital certificate in his own name duly issued to him against the company or the firm of which he happens to be a director or partner, such individual person shall, while uploading any tender for and on behalf of such company or firm, invariably upload a copy of registered power of attorney showing clear authorization in his favour, by the rest of directors of such company or the partners of such firm, to upload such tender. [Non-statutory documents].

16. Registered Unemployed Engineers' Co-operative Societies / Labour Co-operative Societies are required to furnish valid Bye Law, Current Audit Report, and Current N.O.C. from A.R.C.S. and Minutes of last A.G.M. The Engineers Co-operative also has to submit documents of the society consists at least 10 (ten) members out of which at least 60% should hold degree or diploma in any branch in Engineering as per Memo. No. 44-A/4M-11/2002 dt. 09.01.2004 of Deputy Secretary-III, P.W.D. [Non Statutory Documents]

17. Any type of Joint Ventures (JV) will not be allowed.

18. A prospective bidder shall be allowed to participate in a particular 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, without assigning any reason thereof.

19. ~~A bidder can participate in more than one work provided the bid capacity permits and the bidder is capable to arrange and deploy separate set of required machineries for multiple works and complete the work in specified time.~~

~~20. Liquid asset : Gross liquid assets excluding other contractual commitment (some total of cash and bank balances, short term bank deposit and debts/ bills recoverable as per last audited Balance Sheet) should not be less than 10% of Estimated amount put to tender for the works value more than Rs. 2.00 Crore and it will be certified by Chartered Accountant.~~

~~A prospective bidder who does not fulfil the criterion for aforesaid liquid asset shall submit a **bank Certificate** in prescribed form of any scheduled Bank as defined in Reserve Bank of India Act, 1934 as a credit facility of 12% of estimated amount put to tender not exceeding Rs.2.00 Crore and should not be less than 30% of estimated amount put to tender for the works of value more than Rs.2.00 Crore.~~

~~20 A. Copy of self-attested Bank statement showing transaction of last six months of the principle Bank Account of the bidder should be submitted in case the estimated amount put to tender exceeds Rs. 2.00 Crore. [Not Applicable].~~

~~22. Any prospective bidders desirous of attending the pre bid meeting shall send a letter of authority on its letter head specifying the name and designation of the person who will be attending the pre-bid meeting on its behalf to the Superintending Engineer, WBSWC. Any such letter of authority shall reach WBSWC at-least three days before pre bid meeting.~~

~~The bidder may attend the pre bid meeting if necessary.~~

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

24. The executing agency (successful bidder) may not get a running payment unless the gross amount of running bill will be 30% of the tendered amount. Provisions in Clause(s) 7, 8, & 9 contained in Standard Contract Form so far as they relate to quantum and frequencies of payment are to be treated as superseded. The payment will be released to the contractor as per availability of fund.

25.1 Constructional Labour Welfare Cess @ 1(one) % of cost of construction will be deducted from every Bill of the selected agency, CGST, SGST, Royalty & all other Statutory levy/ Cess will have to be borne by the contractor & the rate in the schedule of rates inclusive of all the taxes & cess stated above.

25.2. **Mandatory engagement of Job Card Holders :** As per Notification No. 1140PRD-33011/1/2024-MGNREGA SEC, dated 07.03.2024.

a) Job Card holders shall be mandatorily be engaged in the Departmental works where rural unskilled workers can be engaged. For this, the Departments shall direct various implementing agencies under its fold to incorporate suitable clause in the tender documents as well as in work orders to make it a mandatory clause.

b) The contractor/agency executing the work shall also furnish a certificate after completion of work that only Job Card holders were engaged for unskilled works during execution. The certificate shall be countersigned by the Departmental official directly supervising the work. Scrutiny of such certificate will be done by departmental officials before making payment against work.

26. No Adjustment of Price OR Price Escalation of any kind will be allowed. Adjustment of Price (increase or decrease) Vide Notification No.23-CRC/2M-61/2008,Dated:13.03.2009&NotificationNo.38-CRC/2M-61/2008Dated20.04.2009 shall not be applicable. Since B.O.Q. for the work/works under this N.I.T. is based up on the schedule of rates of Public Works Department for Building works (Volume-I)

and S & P Works (Volume-II) and PWD roads & bridge works (Volume-III) w.e.f 01.11.2017 and PWD Electrical works (Volume-I) w.e.f November, 2017 with up to date Addenda & Corrigendum the bidders shall quote their rate (percentage above/below/at per) accordingly considering that no escalation and/or price adjustment will be allowed by the department thereto under any circumstances.

27. WBGST and CGST rates will be applicable while making payment to the contractor in accordance with the No. 5050-F(Y) Dated: 16.08.2017 of Audit Branch Finance Department, Govt. of West Bengal. The taxable value of the work will also be determining as per this govt. order or any other govt. Orders in vogue or as will be issued by the govt. from time to time in this regard in future . The work may be modified as per govt. order keeping the total value as tendered as a maximum.

28. I) Mobilisation Advance and Secured Advance will not be allowed.

II) Price Preference: - will not be allowed

29. Agencies shall have to arrange required land for installation of Plant & Machineries, (specified for each awarded work, storing of materials, labour shed, laboratory etc. at their own cost and responsibility nearest to the work site.

30.1. Bids shall remain valid for a period not less than 120 days (One Hundred Twenty) from the last date of submission of Financial Bid / Sealed Bid / Open Bid. 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.

All materials required for the proposed scheme including bitumen (all grade), bitumen emulsion, cement & steel shall be of specified grade & approved brand in conformity with relevant code of practice (latest revision) & manufacture accordingly & shall be procured & supplied by the agency at their own cost including all taxes. Authenticated evidence for purchase of bitumen, bitumen emulsion, cement and steel are to be submitted along with challan and test certificate. In the event of further testing opted by the Engineer-in-Charge, then such testing from any Government laboratory.

Approved Testing Laboratory shall have to be conducted by the agency at their own cost. Necessary arrangement shall also have to be kept at site laboratory/laboratory at plant for testing quality of the bitumen supplied for work. Only (VG 30), (VG 40), (VG 10), grade paving bitumen of I.O.C.L/B.P.C.L./H.P.C.L. will be permitted as straight run Bitumen.

30.2. Steel material procure and supply by the contractor shall be of TOR Steel rod/HYSD/TMT Bar of Fe 415, Fe 550/550D. (The grade to be decided by the E.I.C as per instruction reflects on the approved drawing of this department or as stipulated in the department schedule of rates).

31. Date & Time Schedule:-

Sl. No.	Particulars	Date & Time
1	Date of uploading of NIT Tender Documents (online)	09/10/2026 at 18.55 hrs
2	Start date & time to download "Tender documents" (online)	10/10/2026 at 18.55 hrs
3	Start date of submission of Technical & Financial Proposals (online)	13/10/2026 at 11.00 hrs
4	Last date of submission of Technical & Financial Proposals (online)	31/10/2026 at 12.00hrs
5	Date of opening of Technical Proposals (online)	02/11/2026 at 12.00hrs
6	Date of uploading of list of technically qualified bidders (online)	Will be notified later.
7	Date of opening of Financial Proposals (online)	Will be notified later

32. (a) There shall be no provision of Arbitration. Hence Cl. 25 of standard form is omitted vide notification no. 558/SPW dt. 13.12.11 of Secretary, to the Govt. of West Bengal

Clause 25 of standard form is modified vide notification no. **8182–F(Y) dt.26.09.2012** of Finance Department, Govt. of West Bengal, as follows.

Except where otherwise provided in the contract all question and disputes relating to the meaning of specification, 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, estimate, instruction, 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 (Executive Engineer) 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.

(b) Cl No. 01 standard contract form stands modified are as follows:-

The person whose tender may be accepted (hereafter called the Contractor) shall (A) [(within one day for a contract of Rs.1000/- or less, two days for of Rs.2000/- or less and so on up to a limit of 10 days of the receipt by him, of the notification of the acceptance of his tender) deposit with the sub divisional officer / divisional officer in cash or Govt’s security endorses so the sub divisional officer / divisional officer (if deposited for more than 12 months) a sum sufficient with the amount of the earnest money deposited by him, with his tender to make up the full security deposit specified in the tender] or

(B) permit Govt. at the time of making any payment to him for work done under the contract to deduct such sum as will (with the earnest money deposited by him) amount to percent all moneys so payable such deduction to be hold by Govt. by way of security deposit provided always that in the event of the contractor depositing a lump sum by way of security deposit as contemplated at (a) above than and in such case if the sum so deposited shall not amount to 10% of the total estimated cost of the work is shall be lawful for the Govt. at the time of making any payment to the contractor for the work done under the contract to make up the full percentage **of 10% by deducting** a sufficient sum from every such payment as last aforesaid all compensation or all other sum of money payable by the Contractor to the Govt. under the terms of his contract may be deducted from or paid by the sale of a sufficient part of his security deposit or from the interest arising there from or from any sums which may be due or may became due to the contractor by Govt. on any account whatever and in the event of his security deposit being reduced by reason of any such deduction or sale as aforesaid the contract shall within ten days thereafter make good in case or Govt. securities endorsed as aforesaid any sum or sums which may have been deducted from or raised by sale of his security deposit or any part thereof.

33. a) Permanent Fixed Security Deposit will not be allowed as Earnest Money as per G.O.

b) **The rate laid down in the relevant BOQ are inclusive of GST and labour welfare cess.**

34. The intending Bidders shall have their own responsibility and risk to visit and examine the site of works and its Surroundings and obtain all information that may be necessary for preparing the Bid and entering into a contract for the work as mentioned in the Notice inviting Tender, the cost of visiting the site shall be at the Bidder‘s own expense.

35. The intending Bidders shall clearly understand that whatever may be the outcome of the present invitation of Bids. The SUPERINTENDING ENGINEER, on behalf of West Bengal State Warehousing Corporation, reserves the right to reject or accept any application without assigning any reason whatsoever at any stage of bidding.

Prospective applicants are advised to note carefully the minimum qualification criteria as mentioned in Instructions to Bidders before bidding.

36. Prospective bidders shall have to execute the work in such a manner so that appropriate service level of the project/work under improvement is to be maintained during progress of work and a period of 3 *(Three) years* from the date of successful completion of the work to the entire satisfaction of Engineer-in-Charge(Executive Engineer). 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 contract or from his security deposit, or the proceeds of the sale thereof, or of sufficient portion thereof. Refund of Security Deposit will only be made on the pro-rata basis i.e. release of such security deposit to the tune of 30% on expiry of 2nd year (from date of completion of the work), balance 70% on expiry of 3rd year. Hence Cl No. 17 of 2911(ii) is here by superseded as per G.O. No.5784-PW/L & A /2M-175/2017 Dated: 12.09.2017.

For roof treatment work with APP/Tarfelt Sheeting the Defect Liability Period will be 5 years and 30% of which will be refunded on expiry of 4 years, balance amount will be refunded on expiry on 5 years.

37. In case of Ascertaining Authority at any stage of tender process or execution of work necessary registered irrevocable power of attorney is to be produced.

All intending bidders are requested to be present in the office, West Bengal State Warehousing Corporation during opening of the Tender, to observe the tender opening procedure.

38. Suspension and Debarment of Contractor, Supplier and Consultant for Public Works under Public Works Department will strictly enforced as per G.O. No. 547–W(C)/1M–387/15 dt. 16.11.2015 of Joint Secretary to the Govt. of West Bengal, P.W.D. Action in this regard will be taken by as applicable in PWD

39. No **CONDITIONAL/ INCOMPLETE TENDER** will be accepted under any circumstances.

40. Requirement of Principal Machineries which must be possessed by the Agency (ownership or through lease hold) [Non Statutory Document]

41. Original documents in support of possession of the aforesaid machineries is to be furnished if required by the Tender Inviting Authority. Conclusive proof of ownership (Tax invoice, way bill, delivery challan) for each plant and machinery, in working condition shall have to be submitted.

41 a) Maximum age of the machineries shall be 10 years as on the date of publication of NIET. It may be extended up to 15 years, after getting fit certificate **FROM THE MANUFACTURER COMPANY** shall be produced at the time of submission of bid. All other machineries and equipment Shall be in running condition.

41 b) In this connection self-declaration (proforma enclosed) shall also have to be submitted along with the tender and it shall be declared that statement of fact related to the mode of ownership of machineries are true and it also to be clearly stated that required specified machineries shall be installed at the working site within 45 days from the date of work order if the machineries are required in the very

initial stage of the work, otherwise machineries shall be installed at the working site well ahead of the actual requirement as per agency's submitted work programme.

41 c)If tender inviting authority has any doubt in respect of authenticity of uploaded documents in respect of Prime Machineries, he can personally or his any authorised representative may inspect the machineries after informing the bidder.

41 c)The executing authority or its nominated personnel will have the full authority to check the calibration and proper functioning of the machineries prior to and/or during execution of the project to ensure proper functioning as well as quality of end product as per relevant codal provision.

41 d)If the bidder fails to install required plants, machineries and equipment for the instant project within the requisite time, action will be taken as per provision of the contract agreement.

41 e) The bidder shall arrange to establish laboratories at working site for different types of day to day testing as per relevant MoRTH, IRC & IS coda! guidelines at his own cost.

41 f) In case of any dispute for confirmatory testing, the report of NABL accredited Laboratories/ IIT/CRRI/RBRI will govern.

42. a) In the event of acceptance of lowest tendered rate no multiple lowest rate will be considered by the Department.

b) If required the tender inviting authority invite the post tender bid among the qualified bidders.

43. The SUPERINTENDING ENGINEER West Bengal State Warehousing Corporation. Reserves the right to cancel the N.I.T. due to unavoidable circumstances and no claim in this respect will be entertained.

44. Minor irregularity / deficiency may be ignored at the discretion of the Bid Evaluation Committee & no claim whatsoever against such decision of the Bid Evaluation Committee will be entertained.

45. During scrutiny, if it is come to the notice to tender inviting authority that the credential or any other papers found incorrect/manufactured/fabricated, that tenderer will not be allowed to participate in the tender and that application will be out rightly rejected without any prejudice with forfeiture of earnest money forthwith.

46. In case if there be any objection regarding Prequalifying the Agency that should be lodged to the Chairman Tender Committee i.e. The Secretary WBSWC within 48 hours from the period of publication of list of qualified Agency in the designated e-mail and this office receiving section. Such objection has to be written /typed in a letter head paper of the company duly signed and stamped by the authorized signatory. And beyond that time schedule no objection will be entertained by the Tender Committee.

47. Before issuance of the work order, the tender inviting authority may verify the credential & other documents of the successful tenderer if found necessary. After verification, if it is found that such documents submitted by the successful tenderer is either manufacture or false or uploaded information is not as per with the niet for what so ever reasons in that case, work order will not be issued in favour of the tenderer under any circumstances. Then the W.O will be issued to L2.

48. If the stipulation of the various contract documents be at variance in any respect, one will override the other (if in so far as these are at variance) in the order of precedence as given below.

a. Financial bid
b. Special terms & Condition
c. Notice Inviting Tender
d. Technical Bid
e. Standard contract form

Qualification Criteria

The Tender Inviting & Accepting Authority through a "Bid 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

The eligibility of a bidder will be ascertained on the basis of the attested 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 either manufacture 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.

50. Cost of tender document: The Intending Tenderers shall not have to pay the cost of tender documents for the purpose of participating in e-tendering vide Notification No. 199-CRC/2M-10/2012 dated 21.12.2012 of the Secretary, Public Works Department, Govt. of West Bengal.

However, the successful bidder shall have to pay the cost of contract documents **@ Rs. 1000** (One thousand five hundred) only / each for two Nos. at the time of formal agreement. The amount has to be deposited through Demand Draft drawn on any Nationalised bank in favour of **"West Bengal State Warehousing Corporation"** payable at Kolkata.

51. Additional Performance Security: Vide No. IT-06/2017/444-R/PL Dtd: 18.04.17 of the Principal Secretary, PWD, Additional Performance Security shall be obtained from the successful bidder, if the accepted bid value is more than 20% less than the estimated amount put to tender, from the successful bidder having own prime machineries. (If the successful bidder not having ownership of any of the prime machineries, the Additional Performance Security shall be obtained from the successful bidder if accepted bid value is more than 10 % less than the estimated amount put to tender.) The Additional Performance Security shall be equal to 10 % of the tendered amount.

The Additional Performance Security shall be submitted in the form of Bank Guarantee from any Scheduled Bank as per enclosed format (Annexure-II) before issuance of Work Order. If the bidder fails to submit the. Additional Performance Security within seven working days from the date of issuance of Letter of Acceptance, his earnest money will be forfeited.

The said Bank Guarantee shall be valid upto the end of the Contract Period and shall be renewed accordingly, if required. The said Bank Guarantee shall be returned immediately after successful completion of the Contract.

If the bidder fails to complete the work successfully, the Additional Performance Security shall be forfeited at any time during the pendency of the contract after serving proper notice to the Contractor.

Necessary provisions regarding deduction of security deposit from the progressive bills of the contractor as per relevant clauses of the contract will in no way affected/ altered by this Additional Performance Security.

52. Successful bidder will have to execute a formal agreement with WBSWC upon a Non-Judicial Stamp Paper of Rs. 100.00 (Rupees One Hundred only) stating there in to abide by all the Clauses and Sub-Clauses of the aforesaid NIT and the Standard Contract Form.

SENIOR SUPERINTENDING ENGINEER
West Bengal State Warehousing Corporation

SECTION – A

1. ***General guidance for e-Tendering***

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

2. ***Registration of Contractor***

Any contractor willing to take part in the process of e-Tendering will have to be enrolled & registered with the Government e-Procurement system, through logging on to https://etender.wb.nic.in (the web portal of public works department) the contractor is to click on the link for e-Tendering site as given on the web portal.

3. ***Digital Signature certificate (DSC)***

Each contractor 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 Information's Centre(NIC) on payment of requisite amount details are available at the Web Site stated in Clause 2 of Guideline to Tenderer DSC is given as a USB e-Token.

4. The contractor can search & download NIT & Tender Documents electronically from computer once he logs on to the website mentioned in Clause 2 using the Digital Signature Certificate. This is the only mode of collection of Tender Documents.

5. ***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.

6. ***Submission of Tenders.***

General process of submission, Tenders are to be submitted through online to the website stated in Cl. 2 in two folders at a time for each work, one in Technical Proposal & the other is 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 further two covers (folders). ***A-1.***

Statutory Cover Containing

i. Prequalification Application (Sec-B, Form – I)
ii. EMD
iii. Financial Statement (Section – B, Form – II).
iv. Affidavits (Ref:- format shown in ―X‖ & format for general affidavit shown in ―Y‖.
v. Tender form No. 2911(ii) & NIT with all agenda & corrigendum ***(download & upload the same Digitally Signed, quoting rate will only encrypted in the B.O.Q. under Financial Bid. In case quoting any rate in 2911(ii) the tender liable to summarily rejected).***
vi. Special Terms, condition & specification of works.
vii. Certificate of revolving line of credit by the Bank (if required)

A-2. ***<u>Non statutory Cover Containing</u>***

i. Document for current year:- Valid Income Tax return / Professional Tax Clearance Certificate / Professional Tax (Deposit Challan) / valid Trade License / Pan Card / / Valid 15-digit goods and service taxpayer identification number(GSTIN) under GST Act,2017(vide memo no 4374-F(Y),dated: 13/07/2017 of Finance Dept. Audit Branch. /Voter I.D. Card and Aadhar card for self-identification, Provident fund and employees state insurance (deposit challan), Income Tax Acknowledgement Receipt for last five assessment year including current assessment year 2023-24 to be accompanied with the Technical Bid Documents. (Not Statutory Documents)

ii. Registration Certificate under Company Act. (if any).

iii. Registered Deed of partnership Firm/ Article of Association & Memorandum

iv. Power of Attorney (For Partnership Firm/ Private Limited Company, if any)

v. Tax Audited Report in 3 Cd Form along with Balance Sheet & Profit & Loss A/c for the last five years (year just preceding the current Financial Year will be considered as year – I)

vi. Clearance Certificate for the Current Year issued by the Assistant Register of Co -Op(S) (ARCS) bye laws are to be submitted by the Registered labour Co -Op(S) Engineers‘ Co.-Opt.(S)

vii. List of machineries possessed by own along with authenticated copy of invoice, challan & waybill Ref.:- of this NIT (Section –B, Form IV).

viii. List of laboratory Instrument along with authenticated Invoice & Challan.(Ref.:- Cl. No.4 of NIT)

ix. List of Technical staffs along with structure & organization (Section – B, Form – III).

x. 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.(Ref. Cl. No. 3(i) of this NIT(Section – B, Form – V).

Scanned copy of Original Credential Certificate as stated in 3(i) of NIT.

~~xi. A prospective bidder who does not fulfil the criterion for aforesaid liquid asset shall submit a **bank Certificate** in prescribed form of any scheduled Bank as defined in Reserve Bank of India Act, 1934 as a credit facility of 12% of estimated amount put to tender not exceeding Rs.2.00 Crore and should not be less than 30% of estimated amount put to tender for the works of value more than Rs.2.00 Crore.~~

xii. Liquid asset : Gross liquid assets excluding other contractual commitment (some total of cash and bank balances, short term bank deposit and debts/ bills recoverable within six months) should not be less than 10% of Estimated amount put to tender for the works value more than Rs. 2.00 Crore.

Copy of self-attested Bank statement showing transaction of last six months of the principle Bank Account of the bidder should be submitted in case the estimated amount put to tender exceeds Rs. 2.00 Crore.

Note:- Failure of submission of any of the above mentioned documents (as stated in A1 & A2) will render the tender liable to summarily rejected for both statutory & non statutory cover.

B. ***Bid Evaluation Committee(BEC)***

i. Bid Evaluation Committee constituted under the Order No. 4114/T(IV)/-02/2016/SWC Date 21/03/2023 of The Managing Director, WBSWC will function the technical and financial evaluations of the bidder.

ii Opening of Technical / Financial proposal :-

Technical proposals will be open by the SUPERINTENDING ENGINEER, West Bengal State Warehousing Corporation.

iii. Intending tenderers may remain present if they so desire.

iv. Cover (folder) statutory documents (vide Cl. No. 6.A-1) should be open first & if found in order, cover (Folder) for non-statutory documents (vide Cl. No. – 6.A-2) will be opened. If there is any deficiency in the statutory documents the tender will summarily be rejected.

v. Decrypted (transformed in to readable formats) documents of the non-statutory cover will be downloaded & handed over to the tender evolution committee.

vi. Uploading of summary list of technically qualified tenderers

vii. Pursuant to scrutiny & decision of the screening committee the summary list of eligible tenderer & the serial number of work for which their proposal will be considered will be uploaded in the web portals.

viii. While evaluation, the committee may summon the tenderer & seek clarification / information or additional documents or original hard copy of any of the documents already submitted & 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 & Digitally Signed by the contractor.

7. Financial capacity of a bidder will be judged on the basis of working capital and available bid capacity as per clause no. 03 (iv)

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

Submission of false document by tenderer is strictly prohibited & if found action may be referred to the appropriate authority for prosecution as per relevant IT Act with forfeiture of earnest money forthwith.

9. Where an individual person holds a digital certificate in his own name duly issued to him against the company or the firm of which he happens to be a director or partner, such individual person shall, while uploading any tender for and on behalf of such company or firm, invariably upload a copy of registered power of attorney showing clear authorization in his favour, by the rest of directors of such company or the partners of such firm, to upload such tender.

The power of attorney shall have to be registered in accordance with the provisions of the Registration Act, 1908‖

10 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 Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the ground for Employer‘s (tender accepting authority) action**.**

11. AWARD OF CONTRACT

~~(i) If bid capacity is found inadequate the department would be at liberty to accept his bid only such number of work for which his capacity would permit. In such case the choice of work awarded would rest with tender accepting authority.~~

~~**(ii)** Revised bid capacity, working capital including plant & machinery will be calculated in accordance with the accounts 3CD Form & Audited balance sheet submitted in the non-statutory documents & work in hand as stated in Sl(i) above should be submitted through affidavit duly notarized before issuance of Letter of Acceptance.~~

(iii) Each work will be awarded against specific set of machineries as indicated in Section _B Form IV of this NIT.

(iv) The work may be supervised by third party quality checking and project monitoring agency. The Executive Engineer may transfer the responsibility of checking, measurements, recording and billing to such third party.

The Bidder who's Bid has been accepted will be notified by the Tender Inviting & Accepting Authority through acceptance letter/ Letter of Acceptance

The Letter of Acceptance will constitute the formation of the Contract.

The Agreement in standard contract form will incorporate all necessary documents e.g. N.I.T., all addenda-corrigendum, special terms & condition (Section –C), specification of works (Section –D), different filled-up forms (Section –B), B.O.Q. and the same will be constituted between the Tender Accepting Authority and the successful Bidder.

12. In case of any dispute Government order of finance department and other orders of PWD Government of West Bengal will be followed.

SENIOR SUPERINTENDING ENGINEER
West Bengal State Warehousing Corporation

Memo no. 211/ENGG/SWC/2026-27/1(3) Date: 09.10.2026

Copy forwarded for information and wide circulation through his office NOTICE BOARD.

1 The Managing Director, WBSWC.
2 The Chief Engineer, WBSWC.
3 This Office Notice Board

SENIOR SUPERINTENDING ENGINEER
West Bengal State Warehousing Corporation

SECTION – B

FORM –I

PRE-QUALIFICATION APPLICATION

To
The SUPERINTENDING ENGINEER
West Bengal State Warehousing Corporation

Ref: - Tender for_____

(Name _____ of work) _____

_____

_____

N.I.E.T.No.: 15 of 2026-27 of SUPERINTENDING ENGINEER West Bengal State Warehousing Corporation.

_____

Dear Sir,

Having examined the Statutory, Non statutory & 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 order.

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 work(s) given in Enclosure to this letter.

We understand that:
(a) Tender Inviting & Accepting Authority/Engineer-in-Charge can amend the scope & value of the contract bid under this project.
(b) Tender Inviting & Accepting Authority/Engineer-in-Charge reserve the right to reject any application without assigning any reason.

Enclo:- e-Filling:-
1. Statutory Documents
2. Non Statutory Documents

Date: -

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

~~SECTION – B~~
~~Form - II~~
~~FINANCIAL STATEMENT~~

~~B.1~~ ~~Name of Applicant :~~

~~B.2~~ ~~Summary of assets and liabilities on the basis of the audited financial statement of the last financial year.~~

	~~Year (Rs. In lakh)~~	.	.	.	.
~~a) Current Assets :~~ ~~(It should not include investment in any other firm)~~					
~~b) Current liabilities :~~ ~~(It should include bank over draft)~~					
~~c) Working capital :~~ ~~(a) (b)~~					
~~d) Net worth :~~ ~~(Proprietors Capital or Partners Capital or Paid up Capital + Resource & surplus)~~					

~~B.3~~ ~~Summary of turnover on the basis of the audited financial statement of the last five financial year.~~

	~~Year (Rs. In lakh)~~	~~Year (Rs. In lakh)~~	~~Year (Rs. In lakh)~~	~~Year (Rs. In lakh)~~	~~Year (Rs. In lakh)~~
~~e) Average Turnover :~~					

BID CAPACITY OF BIDDERS TO BE ASSESSED ACCORDING TO THE FINANCAIL DECLARATION FURNISHED BY THEM AS PER ANNEXURE BELOW:

ANNEXURE – A

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 as the difference between total assets and total liabilities should be positive.

2) Bidder, 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 works in progress. The projects include turnkey project / Item rate contract / Construction works.

N = Number of year (i.e. _____ year) prescribed for completion of works for which Bids are invited.

B = Financial Liability of the bidder to be incurred for existing commitments and on -going works during the period of the subject contract. **In respect of tenders participated by any Contractor whose rate stands L1 in respect of any work under this corporation will be taken into consideration in calculation of bid capacity.**

To calculate the value of „ A"

i) A table containing value of Engineering Works in respect to Project (Turnkey project / Item rate contract / Construction works) undertaking by the Bidder during the last 5 years is as follows:-

ii)

Sl No.	year	Value of Engineering Works undertaken w.e.f. Project (Rs. in Crores)
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 F.Y. _____ out of the last 5 years and value thereof is Rs. _____ Crore. (Rupees _____) . Further, value updated to the price level of the year indicated in Table is as follows:

Rs. _____ Crore X _____ (Updation Factor as per Table annexed)

= Rs. _____ Crore (Rupees _____)

Table indicating the factor for the year for updation to the price level is indicated as under.

Sl No.	F.Y / Calendar Year	updation 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)

……
……
Signature, name and designation of Authorized Signatory

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

……
……
name of the Statutory Auditor's Firm
Seal of the audit firm.
(Signature, name and designation and Membership No. of authorized 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 the Employer	Percentage of participation of Bidder in the Project	Stipulated period of completion as per Agreement / LOA with the start date	Value of contract as per Agreement / LOA (Rs.)	value of work completed (Rs.)	Balance value of work to be completed (Rs.)	Anticipated date of completion	Financial no. to	Sl Work /
1	2	3	4	5	6	7	8	9	10	1

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

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

Note.

1. All the documents to be submitted in support of Annexure – A, Must be duly signed and sealed by the applicant / bidder and authenticated by statutory Auditor's Firm.

AFFIDAVIT – "X"

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

For Niet- 15e of 2026-27 of S.E. W.B.S.W.C.

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 proved to be false or concealed, the application may be rejected and no objection/claim will be raised by the under-signed.

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

Signed by an authorized officer of the firm _____

Title of the officer _____

Name of the Firm with Seal _____

Date _____

AFFIDAVIT – "Y"

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

For Niet- 15e of 2026-27 of S.E. W.B.S.W.C.

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 proved to be false or concealed, the application may be rejected and no objection/claim will be raised by the under-signed.

2. The undersigned also hereby certifies that neither our firm M/S _____ _____ nor any of constituent partner had been debarred to participate in the tender by the any Govt. department during the last 5 (five) years prior to the date this NIET.

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 and agrees to furnish any such information at the request of The Department.

5. Certified that I have applied in the tender in the capacity of individual/ as a partner of a firm & I have not applied severally for the same job.

6. Certified that I have not failed to complete any work under WBSWC in stipulated time of Tender and at present I have no work in hand to do under WBSWC.

Signed by an authorized officer of the firm _____

Title of the officer _____

Name of the Firm with Seal _____

Date _____

SECTION – B

FORM- III

STRUCTURE AND ORGANISATION

A.1 Name of applicant :

A.2 Office Address :

Telephone No. :

Fax No. :

E– mail Address

A.3 Name and address of Bankers :

A.4 Attach an organization chart showing the structure of the company with names of Key personnel and technical staff with Bio-data. :

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

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

SECTION –B

FORM – IV

C. DEPLOYMENT OF ROAD / BRIDGE MACHINERIES (in favour of owner:-

(Original document of own /arrange possession 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	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) Document showing proof of full payment, (ii) Receipt of Delivery,
(iii)Road Challan from Factory to delivery spot, is to be furnish.

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

SECTION –B
FORM– IV (contd...)

G. CONTRACTOR'S EQUIPMENT

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 bidder **Own/Arrange.**

SENIOR SUPERINTENDING ENGINEER
West Bengal State Warehousing Corporation

SECTION – B

FORM – V

EXPERIENCE PROFILE

Name of the Firm:

D.1 LIST OF PROJECTS COMPLETED THAT ARE SIMILAR IN NATURE TO THE WORKS HAVING MORE THAN 40% OF THE PROJECT COST EXECUTED DURING THE LAST FIVE YEARS.

Name of Employer	Name, Location & nature of work	Name of Consulting Engineer responsible for supervision	Contract price in Indian Rs.	Percentage of Participation of company	Original Date of start of work	Original Date of completion of work	Actual Date of starting the work	Actual Date of completion of work	Reasons for delay in completion (if any)

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 – B

FORM –VI

- I, the undersigned, declare that all the statements made in the attached documents in respect of mode of ownership of machineries are true and correct.
- * Certified that required specified machineries for the works under this NIT will be installed at the working site within 45 days (maximum) from date of LOA/work Order after approving the work program by the executive Engineer within 10 days (maximum) from LOA/work order.
- * The undersigned also hereby certifies that neither our firm_____nor any constituent firm had been debarred to participate in tender by West Bengal State Warehousing Corporation during the last 5(five) years prior to the date of this NIT.
- The undersigned understands and agrees that further qualifying information may be requested and agrees to furnish any such information at the request of the Department.
- Certified that I have applied in the Tender in the capacity of individual/ as a partner of a firm and I have not applied severally for the same job.
- Certified that I have applied in the tender in the capacity of individual/ as a partner of a firm.
- Certified that I have access to or have available liquid assets (aggregate of working capital, cash -in-hand, uncommitted Bank Guarantees) and /or credit facilities not less than 10%estimated cost put to tender. In this respect, I have attached necessary documents with this application.
- I, the undersigned do certify that all the statements made in the attached documents are true and correct. If any declaration submitted is found/ ascertain to be incorrect/fabricated/misrepresented/ fraudulent etc. accordingly tender will be liable to be cancelled/ terminated immediately & I/my firm/ company shall also be liable to prosecuted under section 197, 199 & 200 of Indian Penal Code, 1860 along with section-71 & section 73 of Indian information & technology act 2008 & any other applicable law for the time being in force in addition to forfeiture of Earnest Money/ Security Deposit.

Signed by an authorized officer of the firm _____

Title of the officer _____

Name of the firm with seal _____

Date _____

SECTION – C

Special terms and conditions

C.1 General:

Unless otherwise stipulated all the works are to be done as per general conditions and general specifications as mentioned either in—

(i) _Departmental Schedule‘, which means the 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, or in

(ii) Latest edition of the book of name _Specification for Road and Bridge Works‘ of the M.O.R.T. & H., Surface Transport (Roads Wing), Government of India, published by Indian Roads Congress, New Delhi, for the specification of various works.

For general conditions and general specifications of items of works including supply and carriage works, not appearing in the aforesaid two specification books, relevant Public Works Department Schedule of Rates for Building Works and Materials & Labour in force including up-to-date addenda and corrigenda, if any, issued from competent authority as applicable for the working area of concern State Highway Circle at the time of submission of tender for the working area will be considered.

C.2 Definition of Engineer-in-Charge and commencement of work:

The word ―Engineer-in-Charge‖ means the EXECUTIVE ENGINEER, West Bengal State Warehousing Corporation of the concerned Division. The word ―Department‖ appearing anywhere in the tender documents means West Bengal State Warehousing Corporation of West Bengal, who have jurisdiction, administrative or executive, over part of whole of the works forming the subject matter of the tender or contract. The word ―approved‖ appearing anywhere in the documents means approved by the Engineer-in- Charge. In case, the work is transferred to any other Division, the EXECUTIVE ENGINEER under whom the work will be executed should be treated as the Engineer-in-Charge. The work shall have to be taken up within seven days of the receipt of the 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.

C.3 Terms & Conditions in extended period:

As Clause 5 of standard contract from 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 up to the extended period with all terms and conditions rates etc. remaining unaltered, i.e. the tender is revalidated up to the extended period.

C.4 Co-operation with other agencies and damages and safety of road 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.

C.5 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 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.

C.6 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 authorized agent or representative. For such intimation to the contractor‘s site office, it shall be deemed to the sufficient enough to be served upon the contractor.

C.7 Incidental and other charges:

The cost of all materials, hire charges to Tools and plants, labour, Corporation/Municipal Fee s 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 chargers, 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, Octroy Duty/Terminal Tax, Turnover Tax, 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. separate arrangement of water supply for constructional work as well as drinking water for labour to be made by the contractor. No separate payment will be made for this purpose.

C.8 Authorised Representative of Contractor :

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

a) General day to day management of work.

b) To give requisition for Departmental materials, Tools & Plants etc. to receive the same and sign hand receipts thereof.

c) To attend measurements when taken by the Departmental Officers and sign the records of such measurements which will be taken 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.

C.9 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 of attorney.

C.10 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 before the expiry date of contract. No claim whatsoever for idle labour, additional establishment, enhanced cost of materials and labour and hire charges of tools & plants etc. would be entertained under any circumstances. The contractor should consider the above factor while quoting this 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 standard contract form.

C.11 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 to remove from the site by the contractor as per directed of the Engineer-in-Charge.

C.12 Arrangement of Land :

The contractor will arrange land for installation of his Plants and Machineries, his godown, store yard, 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.

C.13 Use of Government Land :

Before using any space in Government 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, equipment, materials etc. of adequate capacity and shall clear and remove on completion of work and shed, huts etc. which he might have erected in Government 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.

C.14 Work Order Book :

The contractor shall within seven days of receipt of the order to take up work, supply at his own cost one Work Order Book to Sub-Divisional Officer/Assistant Engineer Concerned, who is authorised to receive and keep in custody the Work Order Book on behalf of the Engineer -in-Charge. The Work Order Book shall be kept at the site of work under the custody of Sub-Divisional Officer/Assistant Engineer or his authorised representative. The Work 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 Work 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 Work 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 Work Order Book or any written order from the Tender Accepting Authority.

The first page of the Work 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 & 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 if the Contractor.
i) Signature of the authorized representative duly attested by the Contractor.
j) Signature of the Sub-Divisional Officer/Assistant Engineer concerned.
K) DATE OF ACTUAL COMPLETION OF WORK.
L) DATE OF RECORDING FINAL MEASUREMENT.

Entries in (k) & (l) above shall be filled in on completion of the work and before the Work Order Book is recorded in the office of the Sub-Divisional Officer/Assistant Engineer.

C.15 Clearing Of Materials :

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 chain aging anon 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.

C.16 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 require 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.

C.17 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 analysed in the 1st instant extended possible from the rates of the allied items of work appearing in the tender schedule.
(b)

(b) Rate of supplementary items shall be analysed to the maximum extend possible from rates of the allied items of work appearing in the P.W. D/(Roads) Department schedule of rates of probable items of work forming part of tender document Rates for the working area enforce at the time of N.I.T.

(c) In Case, addition items do not appear in the above Public Works (Roads) Department Schedule of Rates, such items for the works shall be paid at the rates entered in the Public Works Department Schedule of Rates for the working area enforce at the time of N.I.T.

(d) If the rates of the supplementary items cannot be computed even after applications of clauses stated above, the same shall be determined by analyses 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),(c) & (d) 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.

C.18 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 formal Item has been measure up and has been inspected by the Engineer-in-Charge or the Sub-Divisional Officer/Assistant Engineer, as the authorized representatives of the Engineer -in-Charge and order given by him for proceeding with the latter item of work. When however, this is not possible for practical reasons, the Sub-Assistant Engineer, if so authorized by the Sub-Divisional Officer/Assistant Engineer may do this inspection in respect of minor works and issue order regarding the latter item.

C.19 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.

C.20 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 h ousing, water supply, sanitation, light, procurement of food for contractors staff & 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.

C.21 Service Electric connection of the project

The service electric connection to be arranged by the successful tenderer from the WBSEDCL (as required) shall be reimbursed to the contractor on production of original voucher or receipt after actual and genuine payment made by the contractor to the concern Govt. Department for this specific work

C.22 Road opened to traffic :

It should be clearly understood that the contractor will be responsible to keep the road open to all kinds of traffic during execution of the work. The work should be so arranged and the programmed of work must be as adjusted as would not disturb the smooth flow of road traffic in any way. If necessary diversion road should be provided and maintained by the contractor at his own cost for the entire period of work, if not separately provided in the tender. The Contractor should take all necessary precautions including guarding, lighting and barricading as necessary, to guard against the chances of injury or accident to the road user and traffic and ferry users during execution of the work for which nothing extra will be paid except otherwise mentioned in specific price schedule. The contractor will also indemnify the Department against consequences of any such injury or accident, if so happens, as per opinion of the Engineer-in-Charge, due to contractor‘s fault in compliance with any of such obligations.

Suitable road sign as and where necessary should be provided by the contractor at his own cost as per direction of the Engineer-in-charge and shall also be maintained till the completion of the work.

Road barriers with red light at night are to be placed where the existing surface is disturbed with proper road signs. All these shall be done at the cost of the contractor without any extra claim towards department.

C.23 Drawings :

All works shall be carried out in conformity with the drawings supplied by this Department. The Contractor shall have to carry out all the works according to the departmental General Arrangement Drawing and Detail Working Drawings to be supplied by the Department from time to time.

C.24 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 recover from the Contractor‘s bill at rates as will be assessed by the Engineer-in-charge.

C.25 Unserviceable Materials :

The Contractor shall remove all unserviceable materials, obtained during execution at place as directed. The contractor shall dressed 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.

C.26 Contractor’s risk for loss or damage :

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.

C.27 Idle labour & 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.

C.28 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 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.

C.29 Issue of Departmental 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.

C.30 Realization of Departmental claims :

Any some of money due and payable to the contractor (including security deposit returnable to him) under this contract may be appropriated by the Government and set off against any claim of Government for the payment of sum of money arising out of this contract or under any other contract made by the contractor with the Government.

C.31 Compliance of different Acts :

The contractor shall comply with the provisions of the Apprentices Act, 1961, Minimum Wages Act, 1852. Contact Labour (Regulation and Abolition) Act 1970 and the rules and orders issued hereunder from time to time. If he fails to do so, Engineer-in-Charge or SUPERINTENDING ENGINEER of the concern Circle of P.W. (Roads) Directorate may at his discretions, take necessary measure over the contract. The Contractor shall also make himself for any pecuniary liabilities arising out on account of any violation of the provision of the said Act(s). The Contractor must obtain necessary certificate and license from the concerned Registering Office under the Contract Labour (Regulation & Abolition) Act, 1970.

The contractor shall be bound to furnish the Engineer-In-Charge all the returns, particulars or date as are called for from time to time in connection with implementation of the provisions of the above Acts and Rules and timely submission of the same, failing which the contractor will be liable for breach of contract and the Engineer-in-Charge may at his discretion take necessary measures over the contract.

C.32 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.

C.33 Commencement of work :

The work must be taken up within the date as stipulated in the work order and completed in all respects within the period specified in Notice Inviting Tender.

C.34 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 there for as provided in the said clause 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.

C.35 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 ion 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 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.

C.36 Precautions during works:

The contractor shall carefully execute the work without disturbing or damaging underground or overhead service utilities viz. Electricity, Telephones, Gas, Water pipe s, 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.

C.37 Testing of qualities of materials & workmanship :

All materials and workmanship shall be in accordance with the specifications laid down in the contract and also as per M.O.R.T. & H‘s specification for Road and Bridge Works (Latest Revision) and 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 and that must be considered during quoting rate.

C.38 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.

C.39 Procurement of materials :

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

C.40 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.

C.41 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, shor ing, shuttering, dewatering, curing etc. and the rates of respective items or works are to be deemed as inclusive of the same.

C.42 Damaged cement :

Any cement lying at contractor‘s custody 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 or disposed of as directed by Engineer-in-Charge at the costs and expenses of the contractor.

C.43 Issue of Departmental Materials :

Departmental materials will not be issued under any circumstances.

C.44 Force Closure :

In case of force closure or abandonment of the works by the Department the contractor will be eligible to be paid for the finished work and reimbursement of expenses actually incurred but not for any losses.

C.45 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.**

C.46 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 & alterations of specifications.

C.47 Additional Conditions :

A few additional conditions under special terms and conditions :

C.47.1. Rate quoted shall be inclusive of clearing site including removal of surplus (both serviceable & unserviceable) earth, rubbish, materials etc. as per direction of the Engineer -in-Charge.

C.47.2. Rate quoted shall be inclusive of West Bengal Sales Tax, Income Tax Octroy and all other duties, if any.

C.47.3. Display board (Informatory) of size 150cm X 90cm is to be provided at starting and end chain age of the work -site with aluminium plate hoisted on steel tubular pipe/ angle post to a height of 1.5 Metre at the cost of the contractor including fitting, fixing, painting, lettering etc. complete as per direction of Engineer-in-Charge.

C.47.4.The Contractor is to display caution board maintaining I.R.C. norms at his own cost as per direction of Engineer-in-Charge.

C.47.5. Deep excavation of trenches and left out for days shall be avoided.

C.47.6. Labour welfare Cess will be deducted @ 1(one) % of gross bill value as per rule.

C.47.7. The whole work will have to be executed as per Departmental drawings available in this connection at the tender rate.

C.47.8. Income Tax Will be deducted from each bill of the contractor as per applicable rate and rules in force.

C.48 Payment of Bills:

As mentioned in clause 24 of the NIT

C.49 Refund of Security Deposit:

As mentioned in Cl. No. 36 of NIT. In addition to that memorandum no. 4470 – F(y) dated – 05.06.2013 of the WB finance department and memorandum no. 1868- FS/ Sectt/ GE&EM/4M-30/2021 dated – 10.05.2022 of F&S department will be followed

C.50 Arbitration & Security Deposit:

As mentioned in Cl. 32(a) and (b) of NIT

SENIOR SUPERINTENDING ENGINEER
West Bengal State Warehousing Corporation

SECTION - D

Special Specification for Road Works

D.1 Name of Work :

As per Detailed NIT

D.2 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, Kutcha 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 kutcha 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, should 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.3 Preliminaries:

During execution of the work contractor will remain responsible for providing reasonable facilities to traffic on the road and also lighting and guarding of the road during night for its safety while the work is in progress and no extra rate will be paid on this account before taking up the work.

Approximately half of the road width including one flank shall be kept clear to the traffic from all obstruction and the surface shall be properly cleaned and levelled as far as possible. Sign Boards / Direction Boards are to be erected at required points of specified size indicating in red letters on a white back ground as per direction of the Engineer-in-charge. Cost of which should be borne by the agency.

Road barriers shall be placed wherever the existing road surface disturbed with proper' road signs. During night, these should be provided with the light, Night Guard e.g. 'Chowkidar' for watching the barrier etc. shall also be maintained by the Contractor to give due warning to road users specially at night.

D.1 Embankment & Sub-Grade :
(As per **clause-305** of _'Specification for Road and Bridge Works of MORTH')

D.1.1 Scope:

The top 500 mm of the road embankment over the entire formation width and directly supporting the road pavement will be termed as 'Sub-Grade'.

D.1.2. Compaction :

Each layer of the material shall be thoroughly compacted to the densities as specified in tender. Subsequent layers shall be placed only after the finished layer has been tested and accepted by the Engineer-in-Charge.

D.1.3 Density & Compaction requirements for embankment and sub-Grade: (following table as guideline)

Type of work/material			Maximum laboratory dry unit weight (tested as per IS:2720(Pt-8))	Relative compaction as percentage of maximum laboratory dry density (As per IS: 2720 (Pt-8))
1	Embankment :	(i) Embankment height upto 3m not subjected to extensive flooding	1.52 gm/cc	Not less than 95%
		(ii) Embankment height exceeding 3m subjected to extensive flooding	1.60 gm/cc	Not less than 95%
2	Sub-grade and earthen shoulder/ verges/ backfill :	-------	1.75 gm/cc	Not less than 97%
3	Expensive clays	(i) Sub-grade and 500mm portion below sub-grade	------	Not allowed
		(ii) Remaining portion of embankment	------	Not less than 90%

When density measurement reveals any soft areas in the embankment/sub -grade earthen shoulder (verge), further compaction shall be carried out as directed by the Engineer. Inspite of that, the specified compaction is not achieved, the materials in the soft areas shall be removed replaced by approved materials, compacted to the density requirements and satisfaction of the Engineer.

D.1.4 Drainage :

The surface of the embankment/sub-grade at all times during construction shall be maintained at such a cross fall (not flatter than that required for effective drainage of an earthen surface) as will shed water and prevent ponding.

D.2 Granular Sub-Base & Base :
(As per **clause-401 & 404** of _Specification for Road and Bridge Works of MORTH‘)

D.2.1 Granular Sub-Base :

D.2.1.1 Scope:

The work shall consist of laying and compacting well graded materials on prepared sub - grade in accordance with the requirement as per specifications. The material shall be laid in one or more layers as sub-base or lower sub-base and upper sub-base as necessary according to lines, grades and cross sections as shown on the drawings or as directed by the Engineer-in-Charge.

D.2.1.2 Materials :

The materials to be used for the work shall be natural sand, muram, gravel, crushed stone, or combination thereof depending upon the grading requirement. Materials like crushed slag, crushed concrete, brick metal and kankar may be allowed only with the specific approval of Engineer-in-Charge. The materials shall be free from organic or other deleterious constituents and conform to one of three grading as stipulated.

D.2.1.3 Physical Requirements aggregates:

The material shall have a 10% fines value of 50KN or more (for sample in soaked condition & tested in compliance with BS: 812, Pt.-111). The water absorption of coarse aggregate shall be determined as per IS: 2386, Pt.-3 and if this value greater than 2%, soundness test shall be carried out as per IS: 383. For Grading-II & Grading-III materials, the CBR shall be determined at the density and moisture content likely to be developed in equilibrium conditions which shall be taken as being the density relating to a uniform air void content of 5%.

D.2.1.4 Grading of materials:

D.2.1.4.1 For Closed Graded G.S.B :

IS Sieve Designation	Percentage by weight passing the IS Sieve		
	Grading - I	**Grading - II**	**Grading – III**
75 mm	100	----	----
52 mm	80-100	100	----
26.5 mm	55-90	70-100	100
9.5 mm	35-65	50-80	65-95
4.75 mm	25-55	40-65	50-80
2.36 mm	20-40	30-50	40-65
425	10-25	15-25	20-35
75	3-10	3-10	3-10
Minimum CBR Value	**30**	**25**	**20**

D.2.1.4.2 For Coarse Graded G.S.B :

IS Sieve Designation	Percentage by weight passing the IS Sieve		
	Grading - I		**Grading - I**
75 mm	100	75 mm	100
52 mm	----	52 mm	----
26.5 mm	55-75	26.5 mm	55-75
9.5 mm	----	9.5 mm	----
4.75 mm	10-30	4.75 mm	10-30
2.36 mm	----	2.36 mm	----
425	----	425	----
75	< 10	75	< 10
Minimum CBR Value	**30**	**Minimum CBR Value**	**30**

For both the gradations, the materials passing 425 sieve for all the three grading when tested according to IS : 2720, Pt.-5 shall have **Liquid Limit** not more than **25 percent** and **Plasticity Index** not more than **6 percent**.

D.2.1.5 Preparation of sub-grade & Preparation of mix :

Immediately prior to the laying of sub-base materials the sub grade shall be prepared by removing all vegetation and other extraneous materials, lightly sprinkled with water, if necessary, and rolling with one pass of at least 8-10 ton smooth wheeled roller to make the laying bed as per true line, level and cross-fall/ camber.

When the sub-base materials consists of combination of materials mentioned he re-in-above, mixing shall be done mechanically by the mixing-place method, otherwise mixing shall be done as per direction of Engineer-in-Charge.

D.2.1.6 Spreading an compaction :

Spreading and compaction shall be done as per clause-401.4.2of _Specification for Road and Bridge Works of MORTH‘. The sub-base material of grading as specified in the contract shall be spread on the prepared sub-grade by any approved method. The thickness of loose layers shall be so regulated that the minimum thickness of the layer after consolidation does not exceed 100 mm or as specified in the contract. Moisture content of the loose material may be checked where necessary, in accordance with IS: 2720 (Pt -2) and suitably adjusted by sprinkling water. After water has been added the materials shall be processed by approved means, if so directed by the Engineer in charge, until the layer is uniformly wet.

Immediately thereafter, rolling shall be started with at least 8-10 tonnes smooth wheeled Roller. Rolling shall commence at the edges and progress towards the centre longitudinally except that on super-elevated portions where it shall progress from the lower to the upper edge parallel to the centreline of the pavement. Each pass of the roller shall uniformly overlap not less than one -third of the track made in the preceding pass. During rolling, the grade and cross fall shall be checked with the help of straight edge and camber board respectively and any high spots on depressions which become apparent, shall be corrected by removing on adding fresh material. Rolling shall be continued till the density achieved is at least 98% of the maximum dry density for the material determined as per IS: 2720 (Part -8). The surface of any layer of material on completion of compaction shall be well closed free from movement under compaction equipment and from compaction planes, ridges, cracks or loose material. All loses segregated or otherwise defective areas shall be made good to the full thickness of layer and re-compacted.

D.2.2 Jhama Metal Consolidation :

D.2.2.1 Scope:

This work consists of clean, crushed aggregates mechanically interlocked by rolling and bonded together with screening, binding material, where necessary and water laid on a prepared sub-grade/sub-base/ base or existing pavement, as the case may be and finished in accordance with the requirements of stipulated specifications and in conformity with the lines, grades, cross section and thickness as per approved plans or a directed by the Engineer in charge.

D.2.2.2 Materials for Jhama Metal :

Jhama metal of size 40 mm to 70 mm shall be obtained by breaking good quality kiln burnt jhama bats, must not be spongy or with any coating of foreign materials, uniformly vitrified and heavily picked jhama brick and the colour should be copper red to black. The metal should be more or less cubical in shape.

D.2.2.3 Grading of materials & Physical requirement :

Grading of Jhama materials should conforms to the following gradation or as directed by Engineer-in-Charge.

Grading Type	Size Range	IS Sieve Designation	Percentage by weight passing the IS Sieve
Grading-1	90mm to 45mm	125 mm 90 mm 63 mm 45 mm 22.4 mm	100 90-100 25-60 0-15 0-5
Grading-2	63mm to 45mm	90 mm 63 mm 52 mm 45 mm 22.4 mm	100 90-100 25-75 0-15 0-5

Impact Value under wet condition should only be tested in accordance with IS: 5640. (Shall not exceed 30%)

D.2.2.4 Construction Operations :

Immediately prior to the laying of sub-base, the sub grade finished shall be prepared by removing all vegetation and other extraneous matter, lightly sprinkled with water, if necessary, and rolling with one pass of at least 8-10 ton smooth wheeled roller

D.2.2.5 Spreading and Compacting :

The course aggregates shall be spread uniformly and evenly open the prepared sub-base to proper profile by using templates placed across the road about 6 metres apart in such quantities that the thickness of each compacted layer shall not more than 100 mm for Grading-I and 75mm for Grading-2. The spreading shall be done from roadside stacks. In no case shall be aggregates be dumped in heaps directly on the surface prepared to receive the aggregates. The surface of the aggregates spread shall be carefully checked with templates and all high or low spots and segregated spots shall rectified by removing or adding aggregates as may be required. The surface shall be checked frequently with a straight edge while spreading and rolling so as to ensure a finished surface as per approve d plans or as directed by the Engineer-in-Charge.

Immediately following the spreading of the course aggregates, rolling shall be started with at least 8-10 ton smooth wheeled roller of approved type. Except on super-elevated portions where the rolling shall proceed from inner edge to the outer, rolling shall begin from the edges gradually progressing towards the centre. First the edges shall be compacted with roller running forward and backward. The roller shall then move inwards parallel to the centre line of the road, in successive passes uniformly lapping preceding trace by at least one half width. Rolling shall be continued until the aggregates are thoroughly keyed and if required and desired by Engineer-in-Charge screening of approved type shall be applied to produce a dense, compacted mass as per requirement. The roller surface shall be checked transversely and longitudinally with template land any irregularities corrected by loosening the surface adding or removing necessary amount of aggregates and re-rolling until the entire surface conforms to desired camber and grade. In no case shall the use of screenings be permitted to make up depressions.

D.3 Wet Mix Macadam :

(As per **clause-406** of _'Specification for Road and Bridge Works of MORTH')

D.3.1. Scope:

This work shall consists of laying compacting, cleaning, crushed, graded, aggregate and granular materials and premixed with water to a dense mass on a prepared sub -base/base or existing pavement in accordance with the requirement of the specification indicated in the table. The material shall be laid in one or more layers as necessary to lines, grades and cross-sections as directed by the Engineer in charge.

The thickness of a single compacted Wet Mix Macadam layer shall not be less than 75 mm nor more than100mm and compaction shall have to be done by Vibratory Roller as per the approval of the Engineer in charge. Rolling should continue till density achieved is at least 98 percent maximum dry density as per IS: 2720(Part VIII).

D.3.2. Grading requirement for Aggregates:

As per following table :-

IS Sieve Designation	Percent by w eight passing the IS Sieve
52 mm	100
45 mm	95-100
26.5 mm	-----
22.4 mm	60-80
11.2 mm	40-60
4.75 mm	25-40
2.36 mm	15-30
600	8-22
75	0-8
Materials finer than 425 shall have Plasticity Index (PI) not exceeding 6.	

D.3.3. Preparation of Mix :

Wet Mixed Macadam shall be prepared in a approved mixing plant of suitable capacity having provision for controlled addition of water and forced/positive mixing arrangement like Pug mill of Pan type mixer on concrete batching plant.

D.3.4. Spreading of Mix :

Immediately after mixing, the aggregate shall be spread uniformly and evenly upon the prepared sub-base/base in required quantities. The mix may be spread either by a paver finisher or motor grader.

The surface of the aggregate so laid shall be carefully checked with templates and all high or low spots remedied by removing or adding aggregate as may be required. No segregation of larger and fine particles should be allowed. The aggregate as spread should be of uniform gradation with no pockets of fine material

D.3.5. Compaction of the Mix :

After the mixed have been laid to the required thickness grade and cross fall /camber, the same shall be uniformly compacted to the full, depth as per the specification. The compaction shall be done with a help of Vibratory Roller of minimum static weight of 80 K N tol00 K N or equivalent capacity roller.

D.4 Water Bound Macadam :

(As per **clause-404** of _'Specification for Road and Bridge Works of MORTH')

D.4.1. Scope:

Description water bound macadam consist of clean, crushed aggregates mechanically interlocked by rolling and bonded together with screening, binding material, where necessary and water laid on a prepared sub-grade/sub-base/ base or existing pavement, as the case may be and finished in accordance with the requirements of stipulated specifications and in conformity with the lines, grades, cross section and thickness as per approved plans or a directed by the Engineer in charge.

D.4.2. Preparation of base :

The sub-base to receive the W.B.M. course shall be prepared to the specified line and camber and made free of dust and other extraneous materials. Pothole and depressions shall be corrected in an approved manner and rolled until firm with the materials used in sub - base.

D.4.3. Spreading Course Aggregates :

The course aggregates shall be spread uniformly and evenly open the prepared sub-base to proper profile by using templates placed across the road about 6 metres apart in such quantities that the thickness of each compacted layer is not more than 100 mm for grading I

& 75 mm for grading in II & ill. The spreading shall be done from roadside stacks. In no case shall be aggregates be dumped in heaps directly on the surface prepared to receive the aggregates. The surface of the aggregates spread shall be carefully checked with templates and all high or low spots remedies by removing or adding aggregates as may be required. The surface shall be checked frequently with a straight edge while spreading and rolling so as to course a finished surface as per approved plans or as directed by the Engineer –in-Charge.

The course aggregates shall not normally be spread more than 3(three) days in advance of the subsequent construction operations.

D.4.4. Compaction of the Mix :

Immediately following the spreading of the course aggregates, rolling shall be started with at least 8-10 ton tandem or vibratory rollers of approved type. Except on super -elevated portions where the rolling shall proceed from inner edge to the outer, rolling shall begin from the edges gradually progressing towards the centre. First the edges shall be compacted with roller running forward and backward. The roller shall then move inwards parallel to the centre line of the road, in successive passes uniformly lapping preceding trace by at least one half width. Rolling shall be discontinued when the aggregates are partially compacted with sufficient void space in them to permit application of screening. The roller surface shall be checked transversely and longitudinally with template land any irregularities corrected by loosening the surface adding or removing necessary amount of aggregated and re-rolling until the entire surface conforms to desired camber and grade. In no case shall the use of screenings be permitted to make up depressions.

D.4.5. Application of Screenings :

After the course aggregates has been rolled partially with sufficient void spans, screenings to completely fill the interstices shall be applied gradually over the surface. These shall not be damped or wet at time of application. Dry rolling shall be done while the screenings are being spread so that vibration of the roller causes them to settle into the voids of the course aggregates. The screenings shall be spread uniformly in successive thin layers either manually or mechanically.

The screenings shall be applied at a slow and uniform in to the course or more application so as to ensure filling of all voids. This shall be accompanied by dry rolling and rigorous booming. These operations shall continue until no more screenings can be forced into the voids of the course aggregates. The spreading, rolling and brooming of screenings shall be carried out in only such length of the road which could be completed within one day's operation.

D.4.6. Sprinkling of Water Grouting :

After the screenings have been applied, the surface shall be copiously sprinkled with water, swept and rolled. Hand brooms shall be used to sweep the wet screenings into void and to distribute them evenly. The sprinkling, sweeping and rolling operations shall be continued, with additional screenings applied as necessary until the course aggregates has been thoroughly keyed, well bonded and firmly set in its full depths and a grout has been formed at screenings. Care shall be taken to se that the base or sub grade does not get damaged due to the addition of excessive quantities of water during construction.

D.4.7. Setting, Drying and Curing :

After compaction of water bound macadam course, the payment shall be allowed to dry overnight. Next morning hungry spots shall be filled with screenings as directed lightly sprinkle with water; if necessary, and rolled this surface shall be cured for at least 3 days. No traffic shall be allowed in the road until the macadam has set. The compacted W B M course should be allowed to completely dry and set before the next pavement course is laid over it.

D.4.8. Physical Requirements of Course Aggregates for Water Bound Macadam for Sub-base /Base Courses :

Test	Test Method	Requirement
Los Angeles Abrasion Value	IS-2386 (Part-4)	40 percent (max.)
OR		
Aggregate Impact value	2386 (Part-4) OR IS 5640 (For brick metal, kankar, Laterite etc which get softened in presence of water to be tested under wet conditions).	30 percent (max.)
Combined Flakiness and Elongation Index (Total)	IS- 2386 (Part-1)	40 percent (max.)

D.4.9 Grading Requirement of Course Aggregates :

D.4.8.1 Aggregate Grading :

Grading Type	Size Range	IS Sieve Designation	Percent by Wt. Passing
Grade-3	52 mm to 22.4 mm	63 mm 52 mm 45 mm 22.4 mm 11.2 mm	100 95-100 65-90 0-10 0-5
Grade-2	63m to 45m	90 mm 63 mm 52 mm 45 mm 22.4 mm	00 90-100 25-75 0-15 0-5
Grade-1	90mm to 45mm	125 mm	100
		90 mm	90-100
		63 mm	25-60
		45 mm	0-15
		22.4 mm	0-5

Compacted thickness of single layer with Grade-1 aggregate should not exceed 100mm and Compacted thickness of single layer with Grade-2 and Grade-3 should not exceed 75mm.

D.4.8.2 Grading of Screening:

Grading Type	Size of screening	IS Sieve Designation	Percent by Wt. Passing
Screenin g Type-_A‘	13.2 mm	13.2 mm 11.2 mm 5.6 mm 180	100 95-100 15-35 0-10
Screening Type-_B	11.2 mm	11.2 mm 5.6 mm 180	100 90-100 15-35

D.4.10 Blinding Materials :

Blinding materials to be used for water bound macadam as a filler material meant for preventing reveling, shall comprise of a suitable materials approved by the Engineer in charge having a P I Value of less than 6 where the road will not be immediately open to traffic and P I Value of 9 when the road will be immediately be opened to traffic. Quantity of blinding materials to be used as provided in the item of work.

D.5 Primer Coat Over Granular Base :

(As per **clause-502** of _‘Specification for Road and Bridge Works of MORTH‘)

D.5.1 Scope:

The work shall consist of application of single coat of bituminous primer to an absorbent granular surface preparatory to any superimposed bituminous treatment.

D.5.2 Materials:

The choice of bituminous primer shall depend upon the porosity characteristics of the surface to be primed and shall be decided by the Engineer in charge.

D.5.3 Weather and Seasonal Limitation :

The bituminous primer shall applied on a wet surface or during dust storm when the weather is foggy or rainy

D.5.4 Equipment :

The primer distributor shall be equipped for spraying the material uniformly at the specified rates and temperatures

D.5.5 Preparation of road surface :

The surface to be primed shall be swept clean, free from dust and shall be dry. It shall shape to the specified grades and section. It shall also be free from dust, any other irregularities and segregated materials: minor depressions and potholes may be ignored until the surface is primed, after which they shall patched with a suitable premix material prior to the surface treatment.

D.5.6 Application of bituminous primer :

The bituminous primer shall be spread uniformly over the dry surface as prepared by using suitable and approved sprayer at specified rates and temperature so as to provide a uniform unbroken spread of primer.

Temperature of application of a primer needs only be high "enough to permit the primer to be effectively sprayed through suitable sprayer to cover the granular base surface uniformly. The temperature of bitumen emulsion at the time of application may vary from 10°C to 50°C. Any scale of excess primer left on any part of the surface should be swept out over the adjacent surface.

D.6 Bituminous Construction :

(As per **clause-501** of _'Specification for Road and Bridge Works of MORTH')

D.6.1 Materials :

(As per **clause-501.2** of _'Specification for Road and Bridge Works of MORTH')

D.6.1.1 Bitumen :

The binder shall be a penetration bitumen of VG(30)/60-70 Grade as per IS: 73-1961/ IS:73-2006 or an appropriate grade to the region, traffic, rainfall and other environmental conditions as per stipulation of _Specification for Road and Bridge Works of MORTH' or as directed by the Engineer-in-charge. The approved brand of Cationic Bitumen Emulsion shall be decided by the Engineer in charge.

D.6.1.2 Aggregates :

The aggregates shall consist of crushed stone. They shall be clean strong durable of fairly cubical shape and free from disintegrated pieces, organic of deleterious matters and adherent coating and of low porosity. The aggregates shall satisfy the physical requirements set forth below.

D.6.2 Constructional Operation :

(As per **clause-501.3 & 501.4** of _'Specification for Road and Bridge Works of MORTH)

For Premixed method: HMP of approved type shall be employed for mixing the aggregates with the bituminous binder. For 60-70/VG-30 Grade bitumen, the binder shall be heated to a temperature between 150°C- 165°C in approved boilers. The aggregates

Sl. No	TEST	TEST METHOD	ITEM OF WORKS FOR BITUMINOUS MACADUM	ITEM OF WORKS FOR MIX SEAL SURFACING
1	LOS ANGALES ABRASION VALUE OR AGGREGATE IMPACT VALUE	IS: 2386 (PART- 4)	40% MAXIMUM 30% MAXIMUM	40% MAXIMUM 30% MAXIMUM
2	COMBINED FLAKINESS AND ELONGATION INDEX (TOTAL)	IS: 2386 (PART- 1)	30% MAXIMUM	30% MAXIMUM
3	STRIPPNG VALUE	IS: 6241	95% MAXIMUM	95% MAXIMUM
4	SOUNDNESS	IS: 2386 (PART -5)		
	i) LOSS WITH SODIUM SULPHATE 54 CYCLES		12% MAXIMUM	12% MAXIMUM
	ii) LOSS WITH MAGNESIUM SULPHATE 5 CYCLES WATER ABSORPTION		18% MAXIMUM	18% MAXIMUM

should be dry and suitable heated to a temperature from150°C- 170°C separately before these are mixed with hot bitumen in the HMP, provided the difference in temperature between the binder and aggregate at no time exceeds 14°C. The mixing of binder with aggregates shall be continued until the same are thoroughly coated with the binder and temperature of the mix should not exceeded165°C. The mix shall immediately be transported from the HMP to the laying site. The laying temperature of the mix shall not be less than 125°C. All rolling (breakdown, intermediate and finishing) as per clause -501.6 of _Specification for Road and Bridge Works of MORTH should be completed before temperature of the mix comes down to 90°C.

D.6.3 Spreading and rolling :

(As per **clause-501.5 & 501.6** of _'Specification for Road and Bridge Works of MORTH')

The premixed materials shall be filled in the potholes with rakes to required thickness without any undue loss of time and compacting the same with at least 8-10 ton tandem or vibratory roller. When the roller has passed over the whole area once any high spots or depression which becomes apparent shall be corrected by removing or adding premixed materials and finishing the top of the repaired surface, leveled with the adjoining area and completely sand blinding at the rate as specified in the respective item of works. Rolling operation shall be completed in all respects before the temperature of the mix falls below 80°C. The roller wheels shall be kept damp.

D.7 Open graded premix carpet :

(As per **clause-511** of _'Specification for Road and Bridge Works of MORTH')

D.7.1 Scope :

This work shall consist of laying and compacting an open graded carpet of 2 cm thickness in a single course composed of suitable small sized aggregates, premixed with bituminous binder on a previously prepared base, in accordance with the requirements of these specification to serve as a wearing course

D.7.2 Binder :

The binder shall be a penetration bitumen of 60-70/ VG-30 Grade as per IS: 73-1961 or an appropriate grade to the region, traffic, rainfall and other environmental conditions as per stipulation of _Specification for Road and Bridge Works of MORTH' or as dir ected by the Engineer-in-charge. The approved brand of Cationic Bitumen Emulsion for tack coat, if applied shall be decided by the Engineer in charge.

D.7.3 Aggregates :

The aggregates shall consist of crushed stone, crushed gravel/shining or other stone. This shall be clean, durable, fairly cubical in shape and free from disintegrated pieces organic or other deleterious matters and adherent coating. They shall preferably be hydrophobic and of low porosity.

D.7.4 Construction Operation :

As per clause-D.7.5 of this section & clause-511 of _'Specification for Road and Bridge Works of MORTH'.

D.8 Mix Seal Surfacing :

(As per **clause-512** of _'Specification for Road and Bridge Works of MORTH')

D.8.1 Scope :

This work shall consist of laying and compacting mix seal surfacing in a single course composed of suitable aggregates premixed with a bituminous binder on a previously prepared base, in accordance with the requirements of these Specifications, to serve as a wearing course.

D.8.2 Binder :

The binder shall be a penetration bitumen of 60-70 Grade as per IS: 73-1961 or an appropriate grade to the region, traffic, rainfall and other environmental conditions as per stipulation of _Specification for Road and Bridge Works of MORTH' or as directed by the Engineer-in-charge. The approved brand of Cationic Bitumen Emulsion for tack coat shall be

Decided by the Engineer in charge.

D.8.3 Aggregates :

The aggregates shall consist of crushed stone, crushed gravel/shining or other stone. This shall be clean, durable, fairly cubical in shape and free from disintegrated pieces organic or other deleterious matters and adherent coating. They shall preferably be hydrophobic and of low porosity.

D.8.3.1 Aggregate Gradation :

IS Sieve Designation	Percent by weight passing the sieve	
	For Type-_A' MSS	For Type-_B' MSS
13.2mm	-----	100
11.2mm	100	88-100
5.6mm	52-88	31-52
2.8mm	14-38	5-25
90 micron	0-5	0-5

D.8.4 Construction Operation :

As per clause-D.7.5 of this section & clause-511 of _'Specification for Road and Bridge Works of MORTH'.

D.8.5 Proportioning of materials :

The total quantity of aggregates used for Type _A' or _B' Mix Seal Surfacing shall be 0.27 cubic metres per l0 square metres area. The quantity of binder used for premixing in terms of straight-run bitumen shall be 22.0kg and 19.0 kg per 10 square metres area for Type A and B surfacing respectively

D.8.6 Opening to Traffic :

Traffic may be allowed after completion of the final rolling when the mix has cooled down to the surrounding temperature. After rolling is complete, traffic may be permitted for movement on the newly laid bituminous surface. Spreading of stone dust in extreme emergency case be allowed on freshly laid bituminous surface and in that eventualities cost of stone dust shall deemed to have been included in the rate and no extra cost on this account whatsoever will be admissible

D.9 Seal Coat :

(As per **clause-513** of _'Specification for Road and Bridge Works of MORTH')

D.9.1 Scope :

This work shall consist of application of seal coat for sealing of the voids in a bituminous surface laid to the specified levels, grade and cross fall/ camber.

D.9.2 Materials :

D.9.2.1 Binder :

The binder shall be a penetration bitumen of 60 -70 Grade as per IS: 73-1961 or an appropriate grade to the region, traffic, rainfall and other environmental conditions as per stipulation of _Specification for Road and Bridge Works of MORTH' or as directed by the Engineer-in-charge. The approved brand of Cationic Bitumen Emulsion for tack coat shall be decided by the Engineer in charge. Quantity of bitumen shall be as stipulated in the _Specific Priced Schedule of probable items with approximate quantities'.

D.9.2.2 Aggregate :

(i) **<u>For Type-„A"</u> <u>Seal Coat</u> :** Stone chips of appropriate size, 100 percent passing through 11.2mm sieve and fully retained on 2.36mm sieve, with angular fragmented, clean, hard, tough and durable type shall be used. Quantity of stone chips shall be as stipulated in the _Specific Priced Schedule of probable items with approximate quantities'.

(ii) **<u>For Type-„B"</u> <u>Seal Coat</u> :** Sand or Grit of appropriate size, 100 percent passing through 2.36mm sieve and fully retained on 180 micron sieve with clean, hard, uncoated, dry type free from soft or flaky/elongated materials, organic and other deleterious substances shall be used. Quantity of Sand or Grit shall be as stipulated in the _Specific Priced Schedule of probable items with approximate quantities'.

D.9.3 Preparation of surface:

The seal coat shall be applied immediately after laying of bituminous course which is required to be sealed. Before application of seal coat materials the surface shall be clean free of any dust or any extraneous materials. Tack coat with appropriate rate shall be applied on old bituminous surface with specific prior permission of Engineer -in-Charge.

D.9.4 Construction Operation:

As per clause-513.3.3 for Type-_ A 'Seal Coat & clause-513.3.4 for Type-B Seal Coat of _'Specification for Road and Bridge Works of MORTH'.

D.9.5 "Specification for Road & Bridge Works" by MORTH :

The work specification as laid down in ―speciation's for Road & Bridge Work s‖ by MORTH (4th revision) shall be final and binding, in case if any work procedure found unsuitable/ not mentioned/ amended as stated in this Price Bid.

E.10. Mastic Asphalt:

(As per **clause-515** of _'Specification for Road and Bridge Works of MORTH')

F.11. Bituminous Macadam:

(As per **clause-504** of _'Specification for Road and Bridge Works of MORTH')

G. 12. **Dense Graded Bituminous Macadam:**

(As per **clause-507** of _'Specification for Road and Bridge Works of MORTH')

H. 13. Bituminous Concrete

(As per **clause-509** of _'Specification for Road and Bridge Works of MORTH')

SENIOR SUPERINTENDING ENGINEER
West Bengal State Warehousing Corporation

ANNEXURE – VI

Kamashree : Employment Sheet

(to be used by the implementing agency for recording the employment provided)

1	District:	
2	Block:	
3	Name of Work:	
4	Implementing Agency:	
5	Funding Department:	
6	Implementing Department:	
7	Work Order No.	
8	Contractor/Agency:	
9	Gram Panchayat where work is to be implemented:	

Employment provided:

Sl. No.	Name of Worker	Job Card No. (full)	Aadhar No.	No. of days for which engaged	Wage paid (Rs.)	Date of payment
1						
2						
3						

Countersignature of Engineer with Office Seal

Name & Signature of Contractor/Agency

ANNEXURE – VII

Kamashree : Certificate by Contractor/Agency

(to be used by the Contractor/ Agency)

1	District:	
2	Block:	
3	Name of Work:	
4	Implementing Agency:	
5	Funding Department:	
6	Implementing Department:	
7	Work Order No.	
8	Contractor/Agency:	
9	Gram Panchayat where work is to be implemented:	
10	Period during which work was executed:	

Certificate

It is certified that for execution of the work mentioned above Job Card holders were engaged wherever unskilled workers were required and necessary details of such engagement have been submitted through the Employment Sheet.

Countersignature of Engineer with Office Seal

Name & Signature of Contractor/Agency

The bidders may ensure following documents are submitted:

1. EMD	
2. GST	
3. PAN CARD	
4. AADHAR/ VOTER CARD	
5. MACHINERIES (AS STATED)	
6. Technical personnel (AS STATED)	
7. INCOME TAX RETURN (AS APPLICABLE)	
8. PTAX (Current year) (Challan/ Certificate)	
9. TRADE LICENCE (Current year)	
10. Pre-qualification, AFFIDAVIT x & y	
11. FORM I TO VI (AS STATED)	

SEALED AND SIGNED

DATE –