# Tender No-10 TENDER DOCUMENT

**VOLUME: I** 

## **TECHNICAL BID**

Name of Work : – डा० राम मनोहर लोहियानगर आवासीय के पाकेट 'सी.पी.' में एस.टी. पी. के पास निर्माणाधीन 384 एल०आई०जी० भवनों के मध्य विकास कार्य।

Note: The tenderer must read carefully every page of the details, conditions of technical bid and submit in the sealed envelop of technical bid after signing of each page of the conditions.

Year -2015-16

**Executive Engineer** 

# **TECHNICAL BID**

# **Tendere No-10**

Name of Work : – डा० राम मनोहर लोहियानगर आवासीय के पाकेट 'सी.पी.' में एस. टी.पी. के पास निर्माणाधीन 384 एल0आई०जी० भवनों के मध्य विकास कार्य।

Estimated Cost : 79.81 LACS.

Cost of Tender : 2,850.00

Earnest Money : 6.00 LACS

Time of Completion : 4 Month

Defects Liability Period : 12 Month

Validity of Tender : 3 Month

Date of Receipt of Tender : 06.01.2016

Date of Opening of Tender : 06.01.2016

(1) Technical Bid : 06.01.2016

(2) Financial Bid : Laterly Informed to successful

bidder

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## DETAILS OF THE EARNEST MONEY

Name of Work :- डा० राम मनोहर लोहियानगर आवासीय के पाकेट 'सी.पी.' में एस.टी. पी. के पास निर्माणाधीन 384 एल०आई०जी० भवनों के मध्य विकास कार्य।

## DETAILS OF THE EARNEST MONEY ATTACHED

Vied CDR/FDR/Post Office book/NSC/Pc/Time deposit of  $\tilde{0}$   $\tilde{0$ 

 $\tilde{0}$   $\tilde{0}$ 

## CONTRACTOR

## **IMPORTANT NOTICE**

Mere issuance of tender papers does not confirm eligibility.

The eligibility will finally be decided based on the documents Attached & furnished by the tenderer in their %RRE-QUALIFICATION BID+

# **Executive Engine**er

## **INSTRUCTIONS TO BIDDER**

- The tender shall be submitted as two bid system in accordance with the procedures detailed here in specified documents shall be submitted in envelope of appropriate size, which shall be duly sealed.
- 2 Conditional tender will not be considered.
- Tender documents are to be submitted in two envelopes marked No. 1 shall contain for Technical Bid and marked No. 2 for Financial Bid. The details of documents to be submitted with each envelope are given below.

#### LIST OF DOCUMENTS TO BE SUBMITTED

The details or document to be submitted with each envelope are given below:

## **ENVELOPE MARKED -1 (Technical Bid)**

- 1 Earnest money in the shape of NSC/FDR/CDR of schedule bank duly pledged in favour of Excutive Engineer, Meerut Development Authority, Meerut
- 2 Duly filled up pre-qualification documents appended with the tenders.
- List of works satisfactorily completed during the last three financial years in Govt./Semi-Govt along with certificates (Attested copy) clearly indicating Date of start, date of completion, amount of work actually executed. Experience certificates should clearly indicate the head bifurcation of work i.e. Road, Drain, Sewer, Building, Electrical etc.
- 4 Proof of Liquid Assets duly certified by nationalised/Scheduled bank and issued not before six months as per pre-qualification requirement as per Appendix % +(original or attested copy will be entertained).
- Latest income tax clearance Certificate. Valid till date (Original or attested copy) clearly indicating turn over of last three assessment years. In case, ITC not available then Audited Balance Sheet duly counter sig. By C.A. for last three years clearly indicating turnover and TDS may be included.
- 6 List of tools and plants. Affidavit by Notary on minimum Rs. 10/- non judicial stamp paper (original)
- 7 List of Technical staff with their qualification professional experience and length of the service with the firm Affidavit by Notary on min. Rs. 10/- non-judicial stamp paper (original)
- 8 Original Copy / Attested copy of the partnership deed if it is a partnership firm and Attested copy of registration certificate in case of company, sole proprietorship declaration in the case of sole proprietorship firm.
- Authority letter in original or attested by notary not more than one year old of the firm/tenderer in favour of the person who has signed the tender documents with telephone No. and complete postal address.
- 10 Failing in compliance any of the above conditions will lead to rejection of tender.

## **ENVELOPE MARKED – 2 (Price Bid)**

- 1 AFTER EVALUATING technical bid for pre qualification ,the Price bid of successful bidders will be opened on declared date and time.
- Non judicial stamp paper of Rs. 100.00 (Rupees Hundred Only) of U.P. along with revenue stamp.

## **SYSTEM TO OPEN TENDERS:**

- 1 Envelope No. 1 containing the tender fee ,earnest money deposit and pre-qualification documents shall be opened first on specified date and time.
- 2 Sealed price bids of only successful bidders shall be opened after informing by notice and uploading notice on web site of MDA as described in notice on fixed date. The quotes rates of various tenders will be read out Tenderers desirous to be present shall be allowed at the time of opening of price bid.

**Executive Engineer** 

M.D.A. Meerut.

## GENERAL TERMS AND CONDITIONS OF TENDER

- Earnest money is required to be deposited in the shape of NSC/FDR/CDR of the Scheduled Bank of India duly pledged in favour of Excutive Engineer., M.D.A. Meerut. Amount of Earnest Money deposit shall as per published in newspaper.
- 2 Tender of the firms who have litigation in Court of Law against MDA will not be considered.
- 3 Tenders of firms liable to be rejected who have failed to complete the work timely and work is still pending for more than a year in the Authority.
- 4 Tender documents shall not be available for sale from MDA office .Tender documents are only available in the web site of MDA, i.e. www.mdameerut.in
- 5 Tender will be received up to 3.00 P.M. dated as mentioned in tender notice and the pre-qualification bids shall be opened on the same date at 4.00 P.M. in the presence of available tenderers.
- 6 The financial bids of the pre-qualified bidder shall be opened on declared date at 4.00 PM in the office of CEMDA.
- 7 V.C. MDA reserves the right to reject any or all tenders without assigning any reasons.
- 8 Defect liability period for the executed work shall be **one year** after the actual date of completion.
- 9. **JOINT VENTURE FIRM**:

Firms forming joint venture for qualifying in the pre - qualification bid of said tender are not eligible. Experience / turn over / liquid assets of joint venture firm working under one name may be considered. Individual experience / liquid assets of constituents firms shall not be added in joint venture firms.

**Executive Engineer** 

M.D.A. Meerut.

## **Additional General Conditions of Contract**

#### A. General

#### 1. Definitions

**1.1** Terms, which are defined in the Contract Data, are not also defined in the Conditions of Contract but keep their defined meanings. Capital initials are used to identify defined terms.

Bill of Quantities means the priced and completed Bill of Quantities forming part of the Bid.

Compensation Events are those defined in Clause 40 hereunder.

The Completion Date is the date of completion of the Works as certified by the Engineer, in accordance with Clause 48.1.

The Contract is the Contract between the Employer and the Contractor to execute, complete, and maintain the Works. It consists of the documents listed in Clause 2.3.

The Contract Data defines the documents and other information, which comprise the Contract.

The Contractor is a person or corporate body whose Bid to carry out the Works, including routine maintenance, has been accepted by the Employer.

The Contractor's Bid is the completed bidding document submitted by the Contractor to the Employer.

The Contract Price is the price stated in the Letter of Acceptance and thereafter as adjusted in accordance with the provisions of the Contract.

Days are calendar days; months are calendar months.

A Defect is any part of the Works not completed in accordance with the Contract.

The Defects Liability Certificate is the certificate issued by Engineer, after the Defect Liability Period has ended and upon correction of Defects by the Contractor.

The Defects Liability Period is one years calculated from the Completion Date.

Drawings include calculations and other information provided or approved by the Engineer for the execution of the Contract.

The Employer is the party as defined in the Contract Data, who employs the Contractor to carry out the Works, including routine maintenance,. The Employer may delegate any or all functions to a person or body nominated by him for specified functions.

The Engineer is the person named in the Contract Data (or any other competent person appointed by the Employer and notified to the Contractor, to act in replacement of the Engineer) who is responsible for supervising the execution of the Works and administering the Contract.

Equipment is the Contractor's machinery and vehicles brought temporarily to the Site to construct the Works.

The Initial Contract Price is the Contract Price listed in the Employer's Letter of Acceptance.

The Intended Completion Date is the date on which it is intended that the Contractor shall complete the Works. The Intended Completion Date is specified in the Contract Data. The Intended Completion Date may be revised only by the engineer by issuing an extension of time.

Materials are all supplies, including consumables, used by the Contractor for incorporation in the Works.

Plant is any integral part of the Works that shall have a mechanical, electrical, electronic, chemical, or biological function.

The Site is the area defined as such in the Contract Data.

Site Investigation Reports are those that were included in the bidding documents and are reports about the surface and subsurface conditions at the Site.

Specification means the Specification of the Works included in the Contract and any modification or addition made or approved by the Engineer.

The Start Date will be given in the form of work order. It is the date when the Contractor shall commence execution of the Works. It does not necessarily coincide with any of the Site Possession Dates.

A Sub-Contractor is a person or corporate body who has a Contract with the Contractor to carry out a part of the construction work in the Contract, which includes work on the Site.

Temporary Works are works designed, constructed, installed, and removed by the Contractor that are needed for construction or installation of the Works.

A Variation is an instruction given by the Engineer, which varies the Works.

The Works, as defined in the Contract Data, are what the Contract requires the Contractor to construct, install, maintain, and turn over to the Employer. Routine maintenance is defined separately.

## 2. Interpretation

- **2.1** In interpreting these Conditions of Contract, singular also means plural, male also means female or neuter, and the other way around. Headings have no significance. Words have their normal meaning under the language of the Contract unless specifically defined. The Engineer will provide instructions clarifying queries about these Conditions of Contract.
- **2.2** If sectional completion is specified in the Contract Data, references in the Conditions of Contract to the Works, the Completion Date, and the Intended Completion Date apply to any Section of the Works (other than references to the Completion Date and Intended Completion Date for the whole of the Works).
- 2.3 The documents forming the Contract shall be interpreted in the following order of priority:
- (1) Agreement,
- (2) Notice to Proceed with the Work,
- (3) Letter of Acceptance,
- (4) Contractor's Bid,
- (5) Contract Data,
- (6) Special Conditions of Contract Part II,
- (7) General Conditions of Contract Part I,
- (8) Specifications,

- (9) Drawings,
- (10) Bill of Quantities, and
- (11) Any other document listed in the Contract Data.
- 3. Language and Law
- **3.1** The language of the Contract and the law governing the Contract are stated in the Contract Data.
- 4. Engineer's Decisions
- **4.1** Except where otherwise specifically stated, the Engineer will decide contractual matters between the Employer and the Contractor in the role representing the Employer. However, if the Engineer is required under the rules and regulations and orders of the Employer to obtain approval of some other authorities for specific actions, he will so obtain the approval.
- **4.2** Except as expressly stated in the Contract, the Engineer shall not have any authority to relieve the Contractor of any of his obligations under the contract.
- 5. Delegation
- 5.1 The Engineer, with the approval of the Employer, may delegate any of his duties and responsibilities to other people, after notifying the Contractor, and may cancel any delegation after notifying the Contractor.
- 6. Communications
- **6.1** All Certificate, notices or instructions to be given to the contractor by Employer / Engineer shall be sent on the address or contact details given by the contractor in Form of Bid. The address and contact details for communication with the Employer/ Engineer shall be as per the details given Communications between parties that are referred to in the conditions shall be in writing. The Notice sent by Facsimile (fax) or other electronic means shall be effective on confirmation of the transmission. The Notice sent by Registered post or Speed post shall be effective on delivery or at the expiry of the normal delivery period as undertaken by the postal service.

#### 7 Subcontracting

- **7.1** The contractor may subcontract part of the construction work with the approval of the Employer in writing, upto 25% of the contract price but will not assign the Contract. Subcontracting shall not alter the contractor's obligations.
- **7.2** Beyond what has been stated in clauses 7.1, if the contractor proposes sub contracting any part of the work during execution of the works, because of some unforeseen circumstances to enable him to complete the work as per terms of the contract, the Employer will consider the following before according approval:
- a. The Contractor shall not sub-contract the whole of the works.
- b. The Contractor shall not sub-contract any part of the work without prior consent of the Employer. Any such consent shall not relieve the contractor from any liability or obligation under the contract and he shall be responsible for the

acts, defaults and neglects of any his sub-contractor, his agents or workmen as fully as if they were the acts, defaults or neglects of the Contractor, his agents and workmen.

- 7.3 The Engineer should satisfy himself before recommending to the Employer whether
- a. The circumstances warrant such sub-contracting: and
- b. The sub-contractor so proposed for the work possess the experience, qualification and equipment necessary for the job proposed to be entrusted to him in proportion o the Quantum of works to be sub-contracted.

#### 7. 4 Other Contractors

- **7.4.1** The contractor shall co-operate and share the site with other contractors. Public authorities utilities, and the employer between the dates given in the schedule of other contractors, as refereed to in the contract data. The contractor shall also provide facilities and services for them as described in the schedule. The employer may modify the schedule of other contractor, and shall notify the contractor of any such modification.
- **7.4.2** The contractor should take up the work in convenient reaches as decided by the Engineer to ensure there is least hindrance to the smooth flow of traffic including movement of vehicles and equipment of other contractors till the completion of the works.

#### 8. Personnel

- **8.1** The Contractor shall employ for the construction work and routine maintenance the technical personnel named in the Contract Data or other technical persons approved by the Engineer. The Engineer will approve any proposed replacement of technical personnel only if their relevant qualifications and abilities are substantially equal to or better than those of the personnel stated in the Contract Data.
- **8.2** If the Engineer asks the Contractor to remove a person who is a member of the Contractor's staff or work force, stating the reasons, the Contractor shall ensure that the person leaves the Site within seven days and has no further connection with the Works in the Contract.
- **8.3** The Contractor shall not employ any retired Gazetted officer who has worked in the Engineering Department of the State Government and has either not completed two years after the date of retirement or has not obtained State Government's permission to employment with the Contractor.
- 9. Employer's and Contractor's Risks
- **10.** Employer's Risks
- **10.1** The Employer carries the risks which this Contract states are Employer's risks, and the Contractor carries the risks that this Contract states are Contractor's risks.
- **11.1** The Employer is responsible for the excepted risks which are (a) in so far as they directly affect the execution of the Works in the Employer's country, the risks of war, invasion, act of foreign enemies, rebellion, revolution, insurrection or military or usurped power, civil war, riot commotion or disorder (unless restricted to the Contractor's employees), natural calamities and contamination from any nuclear fuel or nuclear waste or radioactive toxic explosive, or (b) a cause due solely to the design of the Works, other than the Contractor's design.

#### 12. Contractor's Risks

**12.1** All risks of loss of or damage to physical property and of personal injury and death which arise during and in consequence of the performance of the Contract other than the excepted risks, referred to in clause 11.1, are the responsibility of the Contractor.

#### 13. Insurance

- **13.1** The Contractor at his cost shall provide, in the joint names of the Employer and the Contractor, insurance cover from the Start Date to the date of completion, in the amounts and deductibles stated in the Contract Data for the following events which are due to the Contractor's risks:
- a) loss of or damage to the Works, Plant and Materials;
- b) loss of or damage to Equipment;
- c) loss of or damage to property (except the Works, Plant, Materials, and Equipment) in connection with the Contract; and
- d) Personal injury or death.
- **13.** Insurance policies and certificates for insurance shall be delivered by the Contractor to the Engineer for the Engineer's approval before the completion date/ Start Date. All such insurance shall provide for compensation to be payable in Indian Rupees to rectify the loss or damage incurred.
- **13.3 (a)** The Contractor at his cost shall also provide, in the joint names of the Employer and the Contractor, insurance cover from the date of completion to the end of defect liability period, in the amounts and deductibles stated in the Contract Data for the following events which are due to the Contractor's risks:
- (a) Personal injury or death.
- **13.4 (b)** Insurance policies and certificates for insurance shall be delivered by the Contractor to the Engineer for the Engineer's approval before the completion date/ start date. All such insurance shall provide for compensation to be payable in Indian Rupees.
- **13.5** Alterations to the terms of insurance shall not be made without the approval of the Engineer.
- **13.6** Both parties shall comply with any conditions of the insurance policies.
- **14.** Site Investigation Reports
- **14.1** The Contractor, in preparing the Bid, may rely on any Site Investigation Reports referred to in the Contract Data, supplemented by any other information available to him, before submitting the bid.
- 15. Queries about the Contract Data
- **15.1** The Engineer will clarify queries on the Contract Data.
- 16. Contractor to Construct the Works
- **16.1** The Contractor shall construct, and install and maintain the Works in accordance with the Specifications and Drawings.
- **16.2** The contractor shall construct the works with intermediate technology, i.e., by manual means with medium input of machinery required to ensure the quality of works as per specifications. The contactor shall deploy the equipment and machinery as given in Contract Data.

- 17. The Works to Be Completed by the Intended Completion Date
- **17.1** The Contractor may commence execution of the Works on the Start Date and shall carry out the Works in accordance with the Programme submitted by the Contractor, as updated with the approval of the Engineer, and complete them by the Intended Completion Date.
- 18. Approval by the Engineer
- **18.1** The Contractor shall submit Specifications and Drawings showing the proposed Temporary Works to the Engineer, who is to approve them.
- **18.2** The Contractor shall be responsible for design of Temporary Works.
- 18.3 The Engineer's approval shall not alter the Contractor's responsibility for design of the Temporary Works.
- 18.4 The Contractor shall obtain approval of third parties to the design of the Temporary Works, where required.
- **18.5** All Drawings prepared by the Contractor for the execution of the temporary or permanent Works, are subject to prior approval by the Engineer before their use.
- 19. Safety
- 19.1 The Contractor shall be responsible for the safety of all activities on the Site.
- 20. Discoveries
- **20.1** Anything of historical or other interest or of significant value unexpectedly discovered on the Site shall be the property of the Employer. The Contractor shall notify the Engineer of such discoveries and carry out the Engineer's instructions for dealing with them.

#### 21 Possession of the Site

- **21.1** The Employer shall handover complete or part possession of the site to the Contractor 7 days in advance of construction programme. At the start of the work, the employer shall handover the possession of at-least 75% of the site.
- 22. Access to the Site
- **22.1** The Contractor shall allow access to the Site and to any place where work in connection with the Contract is being carried out, or is intended to be carried out to the engineer and any person/persons/agency authorized by:
- a. The Engineer
- b. The Employer
- c. The Ministry of Rural Development, Government of India.
- d. National Rural Roads Development Agency, New Delhi
- 23. Instructions
- **23.1** The Contractor shall carry out all instructions of the Engineer, which comply with the applicable laws where the Site is located.

## 24. Dispute Redressal System

24.1 If any dispute or difference of any kind what-so-ever shall arises in connection with or arising out of this Contract or the execution of Works or maintenance of the Works there under, whether before its commencement or during the progress of Works or after the termination, abandonment or breach of the Contract, it shall, in the first instance, be referred for settlement to the competent authority, i.e. **chairman / commissioner , meerut division**. The competent authority shall, within a period of forty-five days after being requested in writing by the Contractor to do so, convey his decision to the Contractor. Such decision in respect of every matter so referred shall, subject to review as hereinafter provided, be final and binding upon the Contractor. In case the Works is already in progress, the Contractor shall proceed with the execution of the Works, including maintenance thereof, pending receipt of the decision of the competent authority as aforesaid, with all due diligence.

#### 25 Procedure for Resolution of Disputes

- **25.1** The Competent Authority mentioned in clause 24.1 shall give a decision in writing within 45 days of receipt of a notification of a dispute.
- **25.2** In case of any dispute or difference arising between the employer and contractor shall be settled only in **the jurisdiction of civil court**, **Meerut**.
- **25.3** Either party may refer a decision of the Competent Authority to civil court of Meerut, within 28 days of the Competent Authority's written decision. If neither party refers the dispute to civil court of Meerut within the above 28 days, the Competent Authority's decision will be final and binding.

## **B. TIME CONTROL**

## 26. Programme

- **26.1** Within the time stated in the Contract Data, the Contractor shall submit to the Engineer for approval a Programme showing the general methods, arrangements, order, and timing for all the activities in the Works, along with monthly cash flow forecasts for the construction of works.
- **26.2** The Contractor shall submit the list of equipment and machinery being brought to site, the list of key personnel being deployed, the list of machinery/ equipments being placed in field laboratory and the location of field laboratory along with the Programme. The Engineer shall cause these details to be verified at each appropriate stage of the programme.
- **26.3** An update of the Programme shall be a programme showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining Works, including any changes to the sequence of the activities.
- **26.4** The Contractor shall submit to the Engineer for approval an updated Programme at intervals of *60 Days* no longer than the period stated in the Contract Data. If the Contractor does not submit an updated Programme within this period, the Engineer may withhold the amount stated in the Contract Data from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Programme has been submitted.

**26.5** The Engineer's approval of the Programme shall not alter the Contractor's obligations. The Contractor may revise the Programme and submit it to the Engineer again at any time. A revised Programme shall show the effect of Variations and Compensation Events.

#### 27 Extension of the Intended Completion Date

- **27.1** The Engineer shall extend the Intended Completion Date if a Compensation Event occurs or a Variation is issued which makes it impossible for Completion to be achieved by the Intended Completion Date without the Contractor taking steps to accelerate the remaining Works, which would cause the Contractor to incur additional cost.
- **27.2** The Engineer shall decide whether and by how much time to extend the Intended Completion Date within 21 days of the Contractor asking the Engineer for a decision upon the effect of a Compensation Event or Variation and submitting full supporting information. If the Contractor has failed to cooperate in dealing with a delay, the delay by this failure shall not be considered in assessing the new Intended Completion Date.
- 28. Delays Ordered by the Engineer
- **28.1** The Superintending Engineer may instruct the Contractor to delay the start or progress of any activity within the Works. Delay/delays totalling more than 30 days will require prior written approval of the Employer.

## 29. Management Meetings

- **29.1** The Engineer may require the Contractor to attend a management meeting. The business of a management meeting shall be to review the plans for the Works.
- **29.2** The Engineer shall record the business of management meetings and provide copies of the record to those attending the meeting. The responsibility of the parties for actions to be taken shall be decided by the Engineer either at the management meeting or after the management meeting and stated in writing to all those who attended the meeting.

#### C. Quality Control

## 30. Identifying Defects

**30.1** The Engineer shall check the Contractor's work and notify the Contractor of any Defects that are found. Such checking shall not affect the Contractor's responsibilities. The Engineer may instruct the Contractor to search for a Defect and to uncover and test any work that the Engineer considers may have a Defect.

## 31. Tests

- 31.1 For Carrying out mandatory tests as prescribed in the specification. The Contractor shall establish field laboratory at the location decided by Engineer. The field laboratory will have minimum equipments as specified in the Contract Data. The contractor shall be solely responsible for: a. Carrying out the mandatory tests prescribed in the Specifications, and b. For the correctness of the test results, whether preformed in his laboratory or elsewhere.
- **31.2** If the Engineer instructs the Contractor to carry out a test not specified in the Specification/ Rural Roads Manual to check whether any work has a Defect and the test shows that it does, the Contractor shall pay for the test and any samples.
- **32.** Correction of Defects noticed during the Defect Liability Period for one year.

- **32.11** The Engineer shall give notice to the Contractor of any Defects before the end of the Defects Liability Period, which begins at Completion of work. The Defects Liability Period shall be extended for as long as Defects remain to be corrected.
- **32.1.2** Every time notice of Defect/Defects is given, the Contractor shall correct the notified Defect/Defects within the duration of time specified by the Engineer's notice.

## 32.2. The RFI system will be followed for execution of work.

#### 33. Uncorrected Defects

**33.1** If the Contractor has not corrected a Defect pertaining to the Defect Liability Period under clause **33.1.1** and of these Conditions of Contract, to the satisfaction of the Engineer, within the time specified in the Engineer's notice, the Engineer will assess the cost of having the Defect corrected, and the Contractor will pay this amount, on correction of the Defect.

#### D. Cost Control

## 34. Bill of Quantities

- **34.1** The Bill of Quantities shall contain items for the construction, installation, testing, and commissioning, maintaining works, and lump sum figures for yearly routine maintenance for each of the five years separately, to be done by the Contractor.
- **34.2** The Bill of Quantities is used to calculate the Contract Price. The Contractor is paid for the quantity of the work done at the rate in the Bill of Quantities for each item for the construction of roads. The payment to the Contractor is performance based for routine maintenance of roads.

## 35. Variations

**35.1** The Engineer shall, having regard to the scope of the Works and the sanctioned estimated cost, have power to order, in writing, Variations within the scope of the Works he considers necessary or advisable during the progress of the Works. Such Variations shall form part of the Contract and the Contractor shall carry them out and include them in updated Programmes produced by the Contractor. Oral orders of the Engineer for Variations, unless followed by written confirmation, shall not be taken into account.

#### 36. Payments for Variations

- **36.1** If rates for variation items are specified in Bill of Quantity, the contactor shall carry out such work at the same rate. This shall apply for variation only up to the limit prescribed in the contract data. If the variation exceeds this limit, the rates shall be derived under the provision of clause 36.3 for quantities (higher or lower) exceeding the deviation limit.
- **36.2** If the rates for Variation are not specified in the Bill of Quantities, the Engineer shall derive the rate from similar items in the Bill of Quantities.
- **36.3** If the rate for Variation item cannot be determined in the manner specified in Clause 36.1 or 36.2, the Contractor shall, within 14 days of the issue of order of variation work, inform the Engineer the rate which he proposes to claim, supported by analysis of the rates. The Engineer shall assess the quotation and determine the rate based on prevailing market rates within one month of the submission of the claim by the Contractor. As far as possible, the rate analysis

shall be based on the standard data book and the current schedule of rates of the district public works division. The decision of the Engineer on the rate so determined shall be final and binding on the Contractor.

#### 37. Cash Flow Forecasts

**37.1** When the Programme is updated, the Contractor shall provide the Engineer with an updated cash flow forecast.

#### 38. Payment Certificates

- **38.1** The payment to the contractor will be as follows for construction work:
- (a) The Contractor shall submit to the Engineer fortnightly/ monthly statements of the value of the work executed less the cumulative amount certified previously supported with detailed measurement of the items of work executed in measurement books authorised by UP. P.W.D. .
- (b) The Engineer shall check the Contractor's fortnightly/monthly statement within 14 days and certify the amount to be paid to the Contractor.
- (c) The value of work executed shall be determined, based on measurements by the Engineer.
- (d) The value of work executed shall comprise the value of the quantities of the items in the Bill of Quantities completed.
- (e) The value of work executed shall also include the valuation of Variations and Compensation Events.
- (f) The Engineer may exclude any item certified in a previous certificate or reduce the proportion of any item previously certified in any certificate in the light of later information.
- (g) The Payment of final bill shall be governed by the provisions of clause 50 of GCC.

#### 39. Payments

- **39.1** Payments shall be adjusted for deductions for advance payments security deposit, other recoveries in terms of the Contract and taxes at source, as applicable under the law. The Engineer shall pay the Contractor the amounts he had certified within 15 days of the date of each certificate.
- **39.2** The Employer may appoint another authority, as specified in the Contract Data (or any other competent person appointed by the Employer and notified to the contractor) to make payment certified by the Engineer.
- **39.3** Items of the Works for which no rate or price has been entered in the Bill of Quantities, will not be paid for by the Employer and shall be deemed covered by other rates and prices in the Contract.

## 40. Compensation Events

- **40.1** The following shall be Compensation Events unless they are caused by the Contractor:
- a) The Engineer orders a delay or delays exceeding a total of 30 days.
- b) The effects on the Contractor of any of the Employer's Risks.

**40.2** If a Compensation Event would prevent the Works being completed before the Intended Completion Date, the Intended Completion Date shall be extended. The Engineer shall decide whether and by how much the Intended Completion Date shall be extended.

#### 41. Tax

**41.1** The rates quoted by the Contractor shall be deemed to be inclusive of the sales and other levies, duties, royalties, cess, toll, taxes of Central and State Governments, local bodies and authorities that the Contractor will have to pay for the performance of this Contract. The Employer will perform such duties in regard to the deduction of such taxes at source as per applicable law.

#### 42. Currencies

All payments will be made in Indian Rupees.

#### 43. Security Deposit/ Retention and Release of Performance Security and Security Deposit/ Retention.

- 43.1 The Employer shall retain security deposit of 5% of the amount from each payment due to the Contractor until completion of the whole of the construction Work. No. security deposit/ retention shall be retained from the payments for Routine maintenance of Works.
- **43.2** On the completion of the whole of the construction Work half the total amount retained as Security Deposit is repaid to the contractor and half when the defect liability period has passed and the Engineer has certified that all defects notified by the Engineer to the contractor before the end of his period have been corrected.
- **43.3** The additional performance security for unbalanced bids as detailed in Clause 51 of Conditions of Contract is repaid to the contractor when the construction work is complete.
- **43.4** The performance security equal to the five percent of the contract price in Clause 51 of Conditions of contract is repaid to the contractor when the period of one years fixed or defect liability period is over and the Engineer has certified that the contractor has satisfactorily carried out the Works.
- **43.5** If the contractor so desires then the Security Deposit can be converted into any interest bearing security of schedule commercial bank in the name of the Employer or National Saving Certificates duly pledged in favour of the Employer for Defect Liability Period.

#### 44. Liquidated Damages

**44.1** The Contractor shall pay liquidated damages to the Employer at the rate per week or part thereof stated in the Contract Data for the period that the Completion Date is later than the Intended Completion Date. Liquidated damages at the same rate shall be withheld if the Contractor fails to achieve the milestones prescribed in the Contract Data. However, in case the Contractor achieves the next milestone the amount of the liquidated damages already withheld shall be restored to the Contractor by adjustment in the next payment certificate. The total amount of liquidated damages shall

not exceed the amount defined in the Contract Data. The Employer may deduct liquidated damages from payments due to the Contractor. Payment of liquidated damages shall not affect the Contractor's other liabilities.

**44.2** If the Intended Completion Date is extended after liquidated damages have been paid, the Engineer shall correct any overpayment of liquidated damages by the Contractor by adjusting the next payment certificate.

#### **45. Advance Payment**

- **45.1** same as determined in special conditioned of contract clause no. 63.
- **45.2** The advance payment shall be repaid by deducting proportionate amounts from payments otherwise due to the Contractor for the construction work, following the schedule of completed percentage of the work on payment basis. No account shall be taken of the advance payment or the repayment in assessing valuation of work done. Variations, price adjustments, Compensation events or liquidated damages.

#### 46. Securities

46.1 The Performance Security equal to five percent of the contract price and additional security for unbalanced bids shall be provided to the Employer no later than the date specified in the Letter of Acceptance and shall be issued in the form given in the Contract Data and by a scheduled commercial bank. The Performance Security shall be valid until a date 45 days from the date of expiry of Defect Liability Period and the additional security for unbalanced bids shall be valid until a date 45 days from the date of issue of the certificate of completion.

#### 47. Cost of Repairs

47.1 Loss or damage to the Works or Materials to be incorporated in the Works between the Start Date and the end of the Defects Correction periods shall be remedied by the Contractor at his cost if the loss or damage arises from the Contractor's acts or omissions.

#### E. Finishing the Contract

- 48. Completion of Construction and Maintenance
- **48.1** The contractor shall request the Engineer to issue a certificate of completion of the construction of the works, and the Engineer will do so upon deciding that the works is completed.

#### 49. Taking Over

**49.1** The Employer shall take over the works within seven days of the Engineer issuing a certificate of completion of works.

#### 50. Final Account

**50.1** The contractor shall supply the Engineer with a detailed account of the total amount that the Contractor considers payable for works under the contract within 21 days of issue of certificate of completion of construction of works. The Engineer shall issue a defect liability certificate and certify any payment that is due to the correct and complete. If the account is not correct or complete, the engineer shall issue within 42 days a schedule that states the scope of the corrections or additions that are necessary. If the account is still unsatisfactory after it has been resubmitted, the Engineer shall decide on the amount payable to the contractor and issue a payment certificate with in 28 days of receiving the Contractor's revised account. The payment of final bill for construction of works will be made within 14

days thereafter.

- **50.2** In case the account is not received within 21 days of issue of Certificate of Completion as provided in clause 50. I above, the engineer shall proceed to finalise the account and issue a payment certificate within 28 days. The payment of final bill for construction of works will be made within 14 days thereafter.
- **51.** Operating and Maintenance Manuals

- **51.1** If "as built" Drawings and/or operating and maintenance manuals are required, the Contractor shall supply them by the dates stated in the Contract Data.
- **51.2** If the Contractor does not supply the Drawings and/or manuals by the dates stated in the Contract Data, or they do not receive the Engineer's approval, the Engineer shall withhold the amount stated in the Contract Data from payments due to the Contractor.

#### 52. Termination

- **52.1** The Employer may terminate the Contract if the Contractor causes a fundamental breach of the Contract.
- **52.2** Fundamental breaches of Contract shall include, but shall not be limited to, the following:
- a) the Contractor stops work for 28 days when no stoppage of work is shown on the current Programme and the stoppage has not been authorized by the Engineer;
- b) the Contractor is declared as bankrupt or goes into liquidation other than for approved reconstruction or amalgamation;
- c) the Engineer gives Notice that failure to correct a particular Defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Engineer;
- d) the Contractor does not maintain a Security, which is required;
- e) the Contractor has delayed the completion of the Works by the number of days for which the maximum amount of liquidated damages can be paid, as defined in clause 44.1;
- f) the Contractor fails to provide insurance cover as required under clause 13;
- g) if the Contractor, in the judgement of the Employer, has engaged in the corrupt or fraudulent practice in competing for or in executing the Contract. For the purpose of this clause, "corrupt practise" means the offering, giving, receiving, or soliciting of any thing of value to influence the action of a public official in the procurement process or in Contract execution. "Fraudulent Practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Employer and includes collusive practice among Bidders (prior to or
- after bid submission) designed to establish bid process at artificial non-competitive levels and to deprive the Employer of the benefits of free and open competition.
- h) if the Contractor has not completed at least thirty percent of the value of construction Work required to be completed after half of the completion period has elapsed;
- i) if the Contractor fails to set up a field laboratory with the prescribed equipment, within the period specified in the Contract Data.
- i) any other fundamental breaches as specified in the Contract Data.
- k) if the Contractor fails to deploy machinery and equipment or personnel as specified in the contract Data at the appropriate time.
- **52.3** Notwithstanding the above, the Employer may terminate the Contract for convenience.
- **52.4** If the Contract is terminated, the Contractor shall stop work immediately, make the Site safe and secure, and leave the Site as soon as reasonably possible.

#### 53. Payment upon Termination

- **53.1** If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Engineer shall issue a certificate for the value of the work done and Materials ordered less liquidated damages, if any less advance payments received up to the date of the issue of the certificate and less the percentage to apply to the value of the work not completed, as indicated in the Contract Data. If the total amount due to the Employer exceeds any payment due to the Contractor, the difference shall be recovered from the security deposit, and performance security. If any amount is still left un-recovered it will be a debt payable to the Employer.
- **53.2** If the Contract is terminated at the Employer's convenience, the Engineer shall issue a certificate for the value of the work done, the reasonable cost of removal of Equipment, repatriation of the Contractor's personnel employed solely on the Works, and the Contractor's costs of protecting and securing the Works and less advance payments received up to the date of the certificate, less other recoveries due in terms of the Contract, and less taxes due to be deducted at source as per applicable law.

#### 54. Property

54.1 All Materials on the Site, Plant, Equipment, Temporary Works, and Works shall be deemed to be the property of the Employer for use for completing balance construction work if the Contract is terminated because of the Contractor's default, till the Works is completed after which it will be transferred to the Contractor and credit, if any, given for its use.

#### 55. Releases from Performance

55.1 If the Contract is frustrated by the outbreak of war or by any other event entirely outside the control of the Employer or the Contractor, the Engineer shall certify that the Contract has been frustrated. The Contractor shall make the Site safe and stop work as quickly as possible after receiving this certificate and shall be paid for all work carried out before receiving it and for any work carried out afterwards to which a commitment was made.

## F. Other Conditions of Contract

#### 56. Labour

- 56.1 The Contractor shall, unless otherwise provided in the Contract, make his own arrangements for the engagement of all staff and labour, local or other, and for their payment, housing, feeding and transport.
- **56.2** The Contractor shall, if required by the Engineer, deliver to the Engineer a return in detail, in such form and at such intervals as the Engineer may prescribe, showing the staff and the numbers of the several classes of labour from time to time employed by the Contractor on the Site and such other information as the Engineer may require.

#### **57.** COMPLIANCE WITH LABOUR REGULATIONS

**57.1** During continuance of the Contract, the Contractor and his sub Contractors shall abide at all times by all existing labour enactments and rules made there under, regulations, notifications and bye laws of the State or Central Government or local authority and any other labour law (including rules), regulations, bye laws that may be passed or notification that may be issued under any labour law in future either by the State or the Central Government or the local authority. Salient features of some of the major labour laws that are applicable to construction industry are given in Appendix to Part I General Condition of Contract. The Contractor shall keep the Employer indemnified in case any action is taken against the Employer by the competent authority on account of contravention of any of the provisions of any

Act or rules made there under, regulations or notifications including amendments. If the Employer is caused to pay or reimburse, such amounts as may be necessary to cause or observe, or for non-observance of the provisions stipulated in the notifications/bye laws/Acts/Rules/regulations including amendments, if any, on the part of the Contractor, the Engineer/Employer shall have the right to deduct any money due to the Contractor including his amount of performance security. The Employer/Engineer shall also have right to recover from the Contractor any sum required or estimated to be required for making good the loss or damage suffered by the Employer.

The employees of the Contractor and the Sub-Contractor in no case shall be treated as the employees of the Employer at any point of time.

## 58. Drawings and Photographs of the Works

- **58.1** The contractor shall do photography/video photography of the site firstly before the start of the work, secondly mid-way in the execution of different stages of work and lastly after the completion of the work. No separate payment will be made to the contractor for this.
- **58.2** The Contractor shall not disclose details of Drawings furnished to him and works on which he is engaged without the prior approval of the Engineer in writing. No photograph of the works or any part thereof or plant employed thereon, expect those permitted under clause 58.1, shall be taken or permitted by the Contractor to be taken by any of his employees or any employees of his sub-Contractors without the prior approval of the Engineer in writing. No photographs/ Video

photography shall be published or otherwise circulated without the approval of the Engineer in writing.

- **59.** The Apprentices Act 1961
- **59.1** The Contractor shall duly comply with the provisions of the Apprentices Act 1961 (III of 1961), the rules made there under and the orders that may be issued from time to time under the said Act and the said Rules and on his failure or neglect to do so he shall be subject to all liabilities and penalties provided by the said Act and said Rules.
- 60. Criminals are prohibited from bidding
- **60.1** Any bidders having **criminal record** is not allowed to paricipate in the bidding process. Any person who is having criminal cases against him or involved in the **organised crime or gangster activities or Mafia or Goonda or Anti social activity** are strictly prohibited to participate in the bidding process. If it is established that any bidder has **criminal record**, **his bid shall be automatically cancelled**.
- **60.2** The bidder has to produced character certificate, Solvency certificate, self decoration affidavit ( on the prescribed proforma which is attached with the bid document ) etc., issued by the competent authority in original with bid document.
- **61.** Any bidder who is an Advocate and Registered with any State Bar Council Shall not be allowed to participate in the bidding. If it is established that the contractor is registered with the state bar council, his bid shall be automatically cancelled.

## **Appendix to Additional General Condition of Contract**

SALIENT FEATURES OF SOME MAJOR LABOUR LAWS APPLICABLE TO ESTABLISHMENTS ENGAGED IN BUILDING AND OTHER CONSTRUCTION WORK.

- **a)** Workmen Compensation Act 1923: The Act provides for compensation in case of injury by accident arising out of and during the course of employment.
- b) Payment of Gratuity Act 1972: Gratuity is payable to an employee under the Act on satisfaction of certain conditions on separation if an employee has completed the prescribed minimum years (say, five years) of service or more or on death the rate of prescribed minimum daysq(say, 15 days) wages for every completed year of service. The Act is applicable to all establishments employing the prescribed minimum number (say, 10) or more employees.
- c) Employees P.F. and Miscellaneous Provision Act 1952: The Act Provides for monthly contributions by the Employer plus workers at the rate prescribed (say, 10% or 8.33%). The benefits payable under the Act are:
- i. Pension or family pension on retirement or death as the case may be.
- ii. Deposit linked insurance on the death in harness of the worker.
- iii. Payment of P.F. accumulation on retirement/death etc.
- **d)** Maternity Benefit Act 1951: The Act provides for leave and some other benefits to women employees in case of confinement or miscarriage etc.
- e) Contract Labour (Regulation & Abolition) Act 1970: The Act provides for certain welfare measures to be provided by the Contractor to contract labour and in case the Contractor fails to provide, the same are required to be provided, by the Principal Employer by Law. The principal Employer is required to take Certificate of Registration and the Contractor is required to take license from the designated Officer. The Act is applicable to the establishments or Contractor of Principal Employer if they employ prescribed minimum (say 20) or more contract labour.
- **f)** Minimum Wages Act 1948: The Employer is to pay not less than the Minimum Wages fixed by appropriate Government as per provisions of the Act if the employment is a scheduled employment. Construction of buildings, roads, runways are scheduled employment.
- **g)** Payment of Wages Act 1936: It lays down as to by what date the wages are to be paid, when it will be paid and what deductions can be made from the wages of the workers.
- h) Equal Remuneration Act 1979: The Act provides for payment of equal wages for work of equal nature to male and female workers and for not making discrimination against female employees in the matters of transfers, training and promotions etc.
- i) Payment of Bonus Act 1965: The Act is applicable to all establishments employing prescribed minimum (say, 20) or more workmen. The Act provides for payments of annual bonus within the prescribed range of percentage of wages to employees drawing up to the prescribed amount of wages, calculated in the prescribed manner. The Act does not apply to certain establishments. The

newly set-up establishments are exempted for five years in certain circumstances. States may have different number of employment size.

- j) Industrial Disputes Act 1947: The Act lays down the machinery and procedure for resolution of industrial disputes, in what situations a strike or lock-out becomes illegal and what are the requirements for laying off or retrenching the employees or closing down the establishment.
- **k)** Industrial Employment (Standing Orders) Act 1946: It is applicable to all establishments employing prescribed minimum (say, 100, or 50). The Act provides for laying down rules governing the conditions of employment by the Employer on matters provided in the Act and get these certified by the designated Authority.
- I) Trade Unions Act 1926: The Act lays down the procedure for registration of trade unions of workmen and Employers. The Trade Unions registered under the Act have been given certain immunities from civil and criminal liabilities.
- **m)** Child Labour (Prohibition & Regulation) Act 1986: The Act prohibits employment of children below 14 years of age in certain occupations and processes and provides for regulations of employment of children in all other occupations and processes. Employment of child labour is prohibited in building and construction industry.
- n) Inter-State Migrant Workmencs (Regulation of Employment & Conditions of Service) Act 1979: The Act is applicable to an establishment which employs prescribed minimum (say, five) or more inter-state migrant workmen through an intermediary (who has recruited workmen in one state for employment in the establishment situated in another state). The Inter-State migrant workmen, in an establishment to which this Act becomes applicable, are required to be provided certain facilities such as Housing, Medical-Aid, Travelling expenses from home up to the establishment and back etc.
- o) The Building and Other Construction workers (Regulation of Employment and Conditions of Service) Act 1996 and the Cess Act of 1996: All the establishments who carry on any building or other construction work and employs the prescribed minimum (say, 10) or more workers are covered under this Act. All such establishments are required to pay cess at the rate not exceeding 2% of the cost of construction as may be modified by the Government. The Employer of the establishment is required to provide safety measures at the building or construction work and other welfare measures, such

as canteens, first-aid facilities, ambulance, housing accommodations for workers near the work place etc. The Employer to whom the Act applies has to obtain a registration certificate from the Registering Officer appointed by the Government.

**p)** Factories Act 1948: - The Act lays down the procedure for approval of plans before setting up a factory, health and safety provisions, welfare provisions, working hours, annual earned leave and rendering information regarding accidents or dangerous occurrences to designated authorities. It is applicable to premises employing the prescribed minimum (say, 10) persons or more with aid of power or another prescribed minimum (say, 20) or more persons without the aid of power engaged in manufacturing process.

#### SPECIAL CONDITIONS OF THE CONTRACT

#### **GENERAL**

- 1 These special conditions shall be read in conjunctions with the General conditions of the contract. Where the provisions of these Special Conditions are at Variance with the provisions of the General Conditions of the contract the provisions of these special conditions shall take precedence.
- 2 The Contractor is expected to be well conversant with the conditions of agreement applicable to MDA, works (General conditions of the contract) which shall be part of the agreement.
- The tenderer are advised to see carefully the site of work and structural / architectural drawings etc. before actually submitting their tender. The structural / architectural drawings for the work under the scope of this tender can be seen in the office of the CE/EE, MDA, Meerut on any working day between 11:00 A.M. to 4:00 P.M.

#### TENDERER TO ENSURE AND NOTE

- 4 The tender is to be addressed to the Executive Engineer, M.D.A. and should be submitted with the name of the work written on the cover as per directions given in instructions to the tenderers. The tenders may be deposited in the tender box specially kept for the purpose in the office of the C.E. M.D.A./ meeting hall MDA. Meerut and in the office of district magistrate. No excuse for the late receipt of the tenders due to any reason shall be considered.
- 5 No page for the tender shall be removed and the entire set must be submitted, as it is, Failure to comply the instructions may result in the rejection of the tender.
- 6 All entries made by the tenderer should be in one link and should be legible Tender should not contain erasures and corrections and if any they should bear the dated initials of the tenderer. The tenderer must sign each page of the tender.
- 7 No additions of alternations are permitted in the tender papers. If tenderer does so, the same shall not be considered and such tender is liable to be rejected.
- 8 Any tenderer not fulfilling all the conditions is likely to be rejected.
- 9 No refund of the cost of tender is claimable for tenders not accepted or for tenders not submitted.
- 10 Contractor has to sign the agreement after submission of stamp paper within ten days from the date of award of the work. In case of delay on the part of the contractor beyond ten days, a penalty of Rs 1000/per day will be imposed and shall be recoverable from contractor and will be deducted from any dues of Contractor.

## **EARNEST MONEY AND SECURITY DEPOSIT**

- 11 If the contractor withdraws his offer/tender, or modified his offer/tender, before acceptance of the tender, his entire earnest money at the time of tender will be forefitted by the authority.
- 12 The contractor shall have to deposit the required earnest money at the time of tender.
- 13 The security of tender is already deposited in the shape of earnest money in advance with tender which shall be released after satisfaction of Engineer in charge and completion of 12 months said as defect liability period from the date of final payment made by authority.
- 14 The tenderer shall submit Non-Judicial Stamp Paper Purchased only from treasury (as per stamp act and G.O. dated 14-08-2002 if I.G. Registration) of following value.
  - 14.1 Rs. 125.00 per thousand in case of cash security according to article 40-A.
  - 14.2 Rs 70.00 per thousand in case of F.D.R/N.S.C./K.V.P. etc according to article 40-B
  - 14.3 Rs. 100.00 only in case of guarantee of two persons as third party according to article 57.
  - 14.4 Rs. 5.00 per thousand to the maximum of Rs. 10,000.00 in case of Bank Guarantee according to article 12-A.
- 15 The earnest money deposited by the unsuccessful bidder shall be returned with in thirty days from the days of acceptance of the tender of within 30 days or receiving the request from tenderer whichever is later.
- 16 After the acceptance of the tender, the earnest money of the successful Contractors shall be

- converted into the Security deposit as said in -13.
- 17 The Security deposited shall be refunded to the contractor after completion of defect liability period 12 months from the actual date of final payment made by authority.

#### **REGARDING MATERIALS**

- 18 All the materials for the works shall be arranged by the contractor at his own cost.
- 19 All the material collected by the contractor during execution of work or otherwise shall be properly stacked and arranged as directed by the Engineer-in-Charge.
- 20 Contractor shall have to make their own arrangement for water and electricity at the site of work. The water should fit for drinking in case the authority supplies the water, the contractor shall have to pay charges at rate fixed by Authority.
- 21 M.D.A. shall give necessary recommendation letter to the concerned authority for giving water and power connection to the contractor. However any delay in getting water or power connection shall not entitle the contractor for any compensation or extension in completion period.
- 22 The stone ballast and grit will be blue textured and free of soft pieces the guage of the ballast shall be as per detailed latest specifications of CPWD/PWD including all correction Slips till date.
- 23 The contractors is to stack the metal at the road beams first according to the size of complete with stack numder as directed by the E/I and no metal shall be stacked on road embankment. The metal shall be allowed to spread for consolidation only after recording of measurements and taken into road metal account register.
- 24 Cement and steel shall have to be arranged by the contractor only from the approved manufacture / rerollers who hole ISI license only cement and steel should be ISI marked and to the entire satisfaction of the E/I. Test certificate for steel will have to submitted by the contractor at the time when steel will be supplied at site.
- 25 With each lot of material arranged by the contractor for construction work he shall produce proper receipt of purchase from the manufacture-roller.
- 26 The contractor has to arrange the test certificates of each lot from an approved test laboratory. Engineer-in-charge, MDA shall have the right to take sample for testing as per CPWD / ISI norms or directed by the Engineer in charge and get it tested. The contractor shall bear all charges of sampling, carriage and testing etc.
- 27 The cement shall be stored at site of work as per B/S requirement and shall be kept under double lock and key system by the contractor at his own cost.
- 28 The Contractor in a register at site shall keep complete accounting of material purchased and consumed. All register at site shall have machine numbered pages.
- 29 The contractor shall provide at his own cost proper storage facility for the materials brought by him to prevent any loss, damage or deterioration of the same.
- 30 The contractor shall confine his equipment storage of materials operation of his works and people to the limits as directed by the E/I and shall not unnecessary spread over the premises with his materials and hutment.
- 31 The Contractor shall make arrangement for watch and ward of the material at his own cost.
- 32 All the materials and workmanship shall be as per specifications described in the contract and in cases not covered in the contract these shall be in accordance with the E/I instructions and shall be subjected from time to the tests as the E/I may direct at places of manufacture at the work site or in the MDA Laboratory or recognized laboratory of the city the contractor Shall provide conveyances labour and material required for examining measuring and testing of the work and a quality of materials, used contractor shall supply sample of the materials get them approved before using in the work. The cost of such conveyance, labour and materials, provided for testing purpose, testing charges and for examining the work and for proper completion of the same shall be borne by the contractor and no extra payment shall be made for the same.
- 33 Samples makes of materials / equipments (electrical) and item of work shall have to be got approved by the contractor from EII before execution.
- 34 The contractor shall ensure to consume the within its expiry date. The material if consumed after the expiry date the affected work will have to be dismantled or the recovery shall be made by the Authority at the rate of double the cost of work in which such materials consumed.

## LABOUR REGULATIONS

- 35 The contractor will have to follows all existing rules and regulations of the Govt. and labour department regarding the labour employed by him without entitling him for any extra claim on this account.
- 36 The contractor shall be responsible for the damages (s) done to any property of injury to any person whatsoever caused by him or any body in his employment or caused in consequence of his work. He will indemnify and keep the Govt. indemnified against claims demands proceedings charges. Cost charges and expenses whatsoever in respect of or in relation to any such injuries or damage. The contractor shall take a necessary precautions for the safety of his employees on the work and shall comply with all applicable provision of safety laws and building codes to prevent accident or injuries to persons on the work.
- 37 Labour cess @1% of total work done will be deducted from the bills of contractor. Labour cess will not claimed by contracter in any means .

#### **EXECUTION OF WORK**

- 38 All drawings and designs will be supplied according to the necessity of the particular work and the contractor will not have any claim for compensation in case of late supply of necessary design drawings.
- 39 For caring out the work the contractor shall be provided with one set of working drawing. Additional copies if required will be supplied to him on payment of additional charges as decided by Engineer-in-Charge.
- 40 The contractor shall be wholly responsible for setting out the works and for the corrections of the positions levels dimensions and alignment according to the plan/drawings including all necessary instruments page poles, etc and other material required for the purpose to the satisfaction of E/I.
- 41 The work shall be executed as per program drawn by the contractor and approved by the E/I. If the part of the site is not available due to any reason the program of the contractor
- 42 If the Engineer-in-charge, MDA shall find that the work progress is slow and feels that the work will not be completed in the time specified then the Engineer-in-Charge, Meerut Development Authority, shall order the contractor to work day and nights and / or on holidays and the contractor shall obey these orders without objection or request for compensation. No compensation whatsoever shall be paid on this account.
- 43 In the event of working at night, the contractor shall provide sufficient lighting safety arrangements for working staff to the satisfaction of the Engineer-in-charge, MDA Any order or approval issued under this clause by the Engineer-in-charge, MDA shall not relieve the contractor from of diminish his obligation under the contract.

### CONTRACTORS SUPERVISORY STAFF

- 44 Within fifteen days of the registration of the contract bound the contractor shall have to notify in writing the names of his two authorized Representatives. One of them will always be available at the site of work to receive technical order and the other for instruction for issue of material sand other miscellaneous works. The contractor shall be fully responsible for the order received by his representative or the materials received by his representative.
- 45 The contractor shall provide sufficient supervision to the work using the skill and attention. He shall deploy following experienced engineer on the work throughout its currency.

Works costing more than Rs. 25.00 Lacs

and up to 50.00 Lacs

Works costing between Rs. 50.00

One Graduate Engineer

and up to 100.00 Lacs

One diploma Engineer

Works costing between Rs. 100.00 to

Two Graduate Engineer

500.00 Lacs Two diploma Engineer

Works costing between Rs. 500.00 to Two Graduate Engineer

and above Three diploma Engineer

The Engineer deployed by contractor shall be got approved in writing from the Engineer-in-charge (whose approval at any time can be withdrawn) for supervision of the work and to receive directions and instructions of the work from E/I. on behalf of contractor. The supervisory staff of the contractor shall not be changed without obtaining the approval of E/I. In, he event of non presence of these Engineers, Authority will deduct @ Rs 10,000.00 PM per graduate Engineer and @ Rs. 6,000.00 PM per diploma Engineer which will be non refundable. The decision of Executive Engineer in regards to presence and/or absence of such engineer from the work shall be final and binding upon the contractor. The contractor will have to remove and person employed on the work if ordered by the E/I for any reason.

46 If the contractor does not use at site the T&P as mentioned in the Appendix £0qthe same shall be arranged by the authority and the necessary deductions for the rental of machinery and T&P shall be made from contractors bills or penalty as deemed fit shall be imposed for which no claim shall be entertained.

#### WORK TO BE DONE AS PER SPECIFICATIONS

- 47 The specification to be follows for the execution of the works shall be:
  - a) The latest MOST/CPWD/PWD specification for works with correction slips up to date of receipt of tender.
  - b) Relevant ISI standard for work not covered by the above.
  - c) Material bearing ISI Mark shall be given first preference for use in works for all articles without ISI marks the quality shall be judged by the relevant ISI specifications.
- 48 The Bill of Quantities is to be read in conjunction with the Form of tender drawings conditions of contract specifications as these documents are jointly explanatory and descriptive of the works included in contract. In case of contract amongst description of the items (s) specifications conditions and drawings, the following order of precedence shall be followed.
  - a) Provision as per direction of items (s)
  - b) Provision in special conditions of contract.
  - c) Provision in specification
  - d) In absence of above the decision of Engineer-in-charge shall be final & binding.
- 49 All works under or in course of execution or executed in pursuance of the contract shall at all times be open to the inspection and supervision of the E/I and other authority Officials at all times during the usual working hours all other times, If notice for the inspection of site by the E/I or any other official is given to the contractor should either himself be present to receive orders and instructions or contractors agent shall be considered to have the same force as if they had been given to the contractor himself. The contractor shall also provide all facilities necessary for inspection of the work by the E/I or their official for which n payment shall be made to the contractor. Engineer-in-charge MDA shall have the right to inspect the work and related documents either through their authorized officers or any agencies appointed

for such purpose as and when the need is felt in order to assess the work progress, the quality of material used in the constructions issued in pursuance of the above inspections.

50 SITE ORDER BOOK shall be maintained at the site of the work in which instructions shall be given to the contractor or in his absence by his authorized representative or agent and in such case it will be presumed the same have been conveyed to him in time.

#### **VARIATIONS**

**51** The quantities given in the bill of quantities are approximate and are liable to variation up to 10% with explaining the clear cause of variation in the interest of said work by Engineer in charge.on same rates as described in tender.

#### RATE

- 52 In quotating their rates the Tenderer should take in to account all fluctuations of the market as no claim shall be entertained on this account during the acceptance of the tender and upto completion of the contract.
- 53 The tendered shall be for all completed items of the work and shall includes all quarry royalties, testing, screening, tools and plants railway freight, carriage of materials to site, stacking and removal charges of any rejected materials and municipal taxes, octori etc. and all other taxes in force from time to time.
- 54 Tendered rates are inclusive of all taxes and levies payable under the respective statutes. However pursuant to the constitution (Forty Sixth Amendment) Act. 1982 if any further tax of levy is imposed by state, after the date of receipt of tenders, and the Contractors there upon necessarily and properly pay such taxes / levies, the contractor shall be reimbursed the amount so paid provided such payment, If any, is not in the opinion of C.E. (whose decision shall be final and binding) attributable to delay in executing of work within the control of the contractor.
  - a) The contractor shall keep necessary books of accounts and other documents for the purpose of this condition as may be necessary and shall allows inspection of the same by a duly authorized representative or as the Engineer-in-charge may require.
  - b) The contractor shall within a period of 30 days of imposition of any further tax of levy Pursuant to the constitution (Forty Sixth Amendment) Act 1982 gives a written notice thereof to the Engineer-in-charge may require.
  - c) No escalation on any account shall be paid.
- 55 Rates quoted shall be considered to be for all height unless specified otherwise.

#### **PAYMENT**

56 The contractor shall submit monthly running bills to the MDA for the work completed by him during the month. The Engineer-in-Charge MDA shall check the bill and 75% payment shall be made for the citified amount within 15 days of submission of bill, balance amount due against this bill shall be released after the same is cleared by the MDA. Security deposit recovered reaches the total figure outlined in clause 1 of

- GPW Form . 9. The certificate of the Engineer-in-charge, MDA regarding the sum payable against bills shall be final and conclusive.
- 57 Any claim, during the period of contract will be submitted in writing within the currency of the contract bond failing which the claim shall not be entertained.
- 58 The contractor shall sign %No claim certificate+on running bills and in case of any claims or extra item he must mention the item and rate and Qty. specifically otherwise no claim shall ne entertained later on. Payment of claim shall only be made as within decided by the competent authority in MDA.
- 59 Sales tax with surcharge shall be deducted on the gross amount of the work done for all the payment made to the contractor according to the provision of U.P. Sales Tax Act modified from time to time.
- 60 The contractor shall submit a certificate along with each bill that full labour payment has been made by th contractor till the end of the preceding month.
- 61 The provision of an item in the bill of quantities will not entitle payment for the same in case if forms part of ar other item as per specifications, Special conditions of contract through the same may have not been specifical in the description of the item (s).
- 62 The contractor shall have to sign FARKHATI at the time of final bill.

## **SECURED ADVANCE**:

## 63. Secured Advance on Materials

The Contractor on signing an indenture in the form to be specified by the Engineer-in-charge, Meerut Development Authority by allowed "Secured Advance" on the security on materials to the extent of 75% of the estimate value of major materials which in the opinion of the Engineer-in-charge, Meerut Development Authority are non perishable and are in accordance with the contract and which have been brought on the site in connection therewith and are adequately stored and/or protected against damage by weather or other causes but which have not at the time of advance been incorporated in the work. When materials on account of which an advance has been made under this sub-clause are incorporated in the works, the amount of such advance shall be deducted from the last payment made under any of the clauses of this contract. An indenture bound on Rs.100.00 non-judicial stamp prepared and submitted.

## **ABNORMALLY HIGH/LOW RATES**

64. In the case of abnormally low rated items, the minimum quantity stipulated in the agreement must be executed and no reduction in quantity shall be allowed without prior approval of the competent authority. And if rates quoted below from bill of quantity rates, the tenderer is abide to deposit an additional performance security as per clause defined in ( General conditions of contract).

## 65. THE ORIGINAL CONSUMPTION OF MATERIAL

After the completion of the work the theoretical quantity of cement to be used on the works shall be calculated on the based on PWD/CPWD statements showing quantities of cement to be used in different items of work provided in the Delhi schedule of rates applicable to the agreement but for the items on which DSR is not applicable the consumption of cement shall be decided the E/I of the work. Over this theoretical quantity of cement further variation on either side shall also be allowed as under.

Maximum permissible percentage

2% (Two percent)For all works

The variations in respect of other materials shall be as per norms in Central P.W.D. work/U.P.P.W.D.

The cost of quantity of cement, steel, bitumen or any other material less used than the theoretical quantity allowing variation of minus side shall be recovered from the contractor at two times of issue rates.

#### **CO-OPERATION WITH OTHER AGENCIES**

- 66. The contractor shall not put hindrance to any person or to other Contractors authorized by the department to carry out works of any nature entrusted to them. The Contractor shall have to allow the other party to work and adjust his work accordingly and no claim shall be entertained on this account. In case of any dispute the decision of the E/I shall be final and binding upon all the parties concerned.
- 67. The contractor shall do his work in such a way that the work of other contractor is not hampered.

#### **MISCELLANEOUS**

- 68. The contractor shall treal all materials obtained during dismantling of a structure, excavation of the site of work etc. as Governments property and such materials shall be disposed of to the instructions in writing issued by the Engineer-in-charge.
- 69. The normal working hours shall be from 8.30 A.M. to 5.30 P.M. and no work shall be carried out on Sunday and on gazetted holidays without specific permission of the E/I No claim whatsoever shall be entertained on this account.
- 70. The contractor shall at all times keep the premises free from accumulated waste material or rubbish caused by his employees on the work and on completion of the work he shall clear away whole site of such material and fill up the borrow pits made by him. He will leave whole of the site and works clear in a workmanlike manner. Nothing extra shall be paid to the contractor for this clearing up. The contractor shall maintain and keep the area in agreed sanitary condition, which is used by men engaged in the work by him. He shall remove and clear all structures etc. Which may have been set up by the Contractor for accommodating his labour on the completion of the work to the satisfaction of the Engineer-in-charge Meerut Development Authority.
- 71. In case of any dispute the decision at C.E./S.E. Meerut Development Authority shall be final and binding on the contractor.
- 72. No claim for the interest will be entertained by the Meerut Development Authority in respect of the deposits mentioned in the contract or in respect of any money or balance which may be in their hands owing to any disputes between the MDA and the contractor or in respect of any delay on the part of Meerut Development Authority in making monthly payments or otherwise.
- 73. The contractor shall have to make arrangements at his own cost for temporary accommodation for the office staff and the laborers residence at the site of work. Suitable area of land shall be earned marked to contractor to put the labour comp. Contractor shall however be responsible to hand over the site to Meerut Development Authority duly cleared from all encumbrance immediately after completion of work failing which completion certificate of the contract shall not be issued.
- 74. Stamp duty will be paid as per rule/order.

## **EXECUTIVE ENGINEER**

## "Conditions Instructions And Important Notes for ELECTRICAL WORKS"

- 1. For Electrical works, approved "A" category certificate of electrical safety directorate shall be necessary.
- No extra cost for claim will be admissible for adopt in those special conditions/ instructions mentioned in the following paras. These conditions should be thoroughly studied and taken into account by the contractor while tendering and signing the contract agreement.
- 3. All works should be carried out as per latest U.P.P.W.D./U.P.P.C.L., Vikas Pradhikaran specification laid down for external electrical works.
- 4. All the items, fixtures to be used on the work shall be as per drawing and U.P. P.W.D./U.P.P.C.L. Vikas Parishad specifications as mentioned and sample shall to be govt. approved by the E/I. Necessary drawings maybe made available by the E/I.
- 5. The Contractor must visit site and office and understand the specifications of material of the works.
- 6. The contractor shall only store such material at site, which are to be used in the work. Material which are not to be used in the work material of inferior quality shall not stored at site without the written permission of the E/I, MDA is not bound to provide free storage or place to the contractor. The Contractor shall have to make his own arrangement at his own cost.
- 7. The contractor shall remove all the defects till the works is handed over to Uttar Pradesh Power Corporation, Ltd. And he will cooperate and help him handing over the work.
- 8. The work shall be opened for inspection by the Technical Audit Cell or any inspecting authority constituted by the GTDA and defects pointed out by them will have to be removed by the contractor as his own cost, within given years of finalisation of the bound, incase the contractor fails to rectify those defects, actions for recovery of amount required for rectification of these defects shall however be taken by the Authority.
- 9. The contractor to whom is allotted may have to produce on demand by the MDA purchase vouchers, challan etc. From the principal manufacture of authorised dealer for verification of correct supply of material. The contractor will have to submit on demand the satisfactory test certificate of materials used in the works which shall be issued from the principal manufacturer or dealer.
- 10. The Authority is not responsible for arranging any material whatsoever and the contractor will have to complete the work specified time with specified material, Non, availability of material delay in arrival of the consignment shall not be entertained as an excuse for extension of time for completion of work.
- 11. Tender will remain open for acceptance upto be three months tenders will have no right to revise tender within this period. However the department may negotiate in this context.
- 12. General maintenance period will be **one year** form the date of bill approved by vice chairman M.D.A. The security of the contractor deposited deducted from the bill will be admissible for refund after the above mentioned maintenance period during this period the contractor will remove all defects and lapses in execution, if any pointed cut by U.P.P.C.L from time to time.

13. The contractor will submit a drawing of the electrification work executed the drawings paper approved by the Engineer-in-charge before payment of the final bill and alongwith no claim certificate statement of accessories used without any additional cost in four sets the cost included in the estimated cost on the tendered work.

## 14. Mode of quoting the rates:

The tenders shall quote their rates on OVER ALL BASIS .AS ....% above/below in financial bid..

- 15. The contractor will take care that while construction of lines and substation the Indian Electricity rules are followed in respect of clearance safety sag etc. the sag should be as per I.S.S. and to the satisfaction of Engineer-in-charge.
- 16. Mode of measurement of over had conductor and earth wire will be by weight and will be calculated by measuring the distances from centre to centre of the pole and computing the weight of the conductor of the that size and length by using standard table plus 3% extra shall be allowed for wastage sag. Jointing binding jumpering etc.

## 17. Completion report.

After completion, test result on the prescribed performa a Appendix 4 U.P.P.W.D. schedule clauses 107, 314, 414) and route layout position of Poles duly marked on the Housing scheme building site plan, shall be submitted by the contractor. The portion of the building etc. damaged during the erection of installation shall be repaired property to original finish and colour of the building etc by contractor on his cost.

- 18. The successful tender will have to sign an Indemnity Bond on a Rs. 100/- non Judicial Stamp paper duly attested by the Notary.
- 19. Before tending the rates contractor should carefully study the Electrical construction manual of U.P.P.C.L. all the items used where the drawing are not available final decision of engineer-incharge of the work will have to be accepted by the contractor
- 20. The successful tender/contract will be fully responsible for any damage of his men or any damage or 3<sup>rd</sup> party of their property or MDA property caused by him during the work.
- 21. In case of any dispute arising in execution of the agreement the matter will be reffered to MDA for decision which will be final and binding on the contractor. 4
- 22. The contractor will also be responsible to obtain necessary approval of the work executed by him from the chief Electrical inspector to the U.P. Government and also to get line energized from the U.P.P.C.L Necessary fees or charges as required will be paid by the MDA on production original receipts.
- 23. The contractor shall not without the consent in writing of the executive engineer sublet his contract other than the raw materials.
- 24. The contractor shall at all items provide sufficient notice and caution board, lights and watchmen to protect and warn the public and guard the work.

- 25. The contractor will have to complete all the work within the time allowed but due to any Unavoidable circumstances if the contractor requires the extension of time, be will apply to the executive Engineer/Asstt. Engineer on inland letter through registered post giving the full details of rca on for granting of extension of time.
- 26. 25% payment of the work done will be temporarily deducted and will be released after successfully completing the work and handing it over to U.P.P.C.L. / Nagar Nigam.
- 27. The final payment of the work shall be given to the contractor after successfully testing and handing over the work to U.P.P.C.L./ Nagar Nigam as required by E/I/C.
- 28. If the complete work or any portion there of be found to be defective or it fails to fulfill the requirements of the contract the contractor shall forthwith made the defects goof for contract.
- 29. The contractor will also maintain first aid box etc at the site of works and follow rules aplicable to control from time to time.
- 30. The successful tenderer will also be fully responsible to obtain the approval of drawing design of the work from the U.P.P.C.L. before starting the work.
- 31. The contractor will have to get the material to be used at site inspected by the Department before starting the work.
- 32. Any additional information regarding the work will be available at the office of Engineer . In-Charge (Electrical) on any working day. Contractor will produce gate pass/Inspection report of material used to the department before claiming the bill.
- 33. Successful tenderer will have to ensure the inspection and testing of material by PVVNL prior to starting the work and also handing over of work to PVVNL / Nagar Nigam Meerut.
- 34. The maintenance period (complete with material) of the work completed will be one years from the date of handing over the work to PVVNL / Nagar Nigam Meerut.
- 35. Firm will be responsible to obtain required permission from Sahyak Nideshek viduyt suraksha meerut before energising the work the work done.
- 36. Successful tendered will have to bear the expenses incurred in the testing of the material at manufacturing unit by the engineer in charge or person nominated by him.

**EXCUTIVE ENGINEER** 

#### SPECIAL CHECKS/ SPECIFICATIONS of works DURING EXECUTION

## for Various activities of construction

#### 1. EARTH WORK IN EMBANKMENT

- (i) Compact the original ground.
- (ii) Clods or hard lumps should be broken down to 15 cm. when placed in body of embankment and 6cm. when place in sub-grade portion.
- (iii) During compaction have a particulars check on :
  - (A) Soil should be spread in uniform layers not exceeding 250mm loose compacted to 200mm.
  - (B) Moisture content at the time of compaction should be + 1 to 2% of OMC.
- (iv) Density of each layer not be checked before permitting subsequent layers.
- (v) Soil test to be conducted to check PI value, which should be less than 6%

#### 2. PREPARATION OF SUB-GRADE:

Look into the following points while preparation the base prior to laying of sub grade.

- (i) The surface should be finished to the specified grade, level and camber (2.5%) and checked by used of template, and straight edge.
- (ii) The sub-grade should be such so as to give at least 95% /97% (as stipulated in specification) of MD density and should not be in saturated condition at the time of laying of sub grade coarse (90-45mm aggregate)

### 3. WATER BOUND MACADAM (WBM):

Special attention on following points construction:

- (i) Arrangement for lateral points confinement of arrangement must be provided. This conveniently be done by raising the shoulders in stage equal in thickness each layers of WBM.
- (ii) Do not allow spreading of coarse aggregate to a length more than that could be compacted during the next 3 days.I
- (iii) Dry roll the aggregate thoroughly correct the high/low spots. Complete rolling indicated by a loose stone piece getting crushed under the roller with out sinking.
- (iv) Rolling should start from low edges and progress gradually towards higher points. Each roller pass should overlap half the width of the earlier pass.

- (v) After rolling aggregate (ballast) apply screening (filler matter) in thin layers in operations at slow rate. The binding material should be dry and the objective should be to drive in as much binder as possible to fill up all the voids of the aggregate. Dry roll should be continued as the screenings are applied.
- (vi) Sprinkle the surface with water, sweep and roll. Avoid too much water that can soften the sub grade.
- (vii) Continue rolling till full compaction is achieved.
- (viii) P.L. of filler material should be up to 6%

## **QUALITY CONTROL FOR ROAD WORKS**

## 1. TOLERANCES IN SURFACE LEVEL:

(i) Sub-grade - +20mm-25mm

(ii) Sub base (Flexible) - +10mm-20mm

(iii) Base coarse (flexible) -

(A) Bituminous coarse - +6mm . 6mm

(iv) Other than bituminous

(A) Machine laid - 10mm + 15mm

(B) Manually - +15mm . 10mm

## 2. TEST ON EARTH WORK FOR EMBANKEMENT:

(1) Compaction control shall be exercises for the body of embankments on each layer of earth by taking at least one test of density per 1000 cam moisture content prior compaction one test per 250 cum of soil.

(i) Water bound macadam :

(ii) Aggregate impact value : One test per 200cm of aggregate

(iii) Grading : One test per 100 cum.

(iv) Flakiness Index : One list per 200 cum

#### CONTROL TESTS FOR BITUMINOUS WORK

(1) Tack coat

As directed by Engineer-in-charge

(2) Quality of binder

Both at plant an at the time of application tack coat.

(3) Rate of spread of binder to be adjusted as per the yards sticks, at regular internal (one hour)

#### 3. BITUMINOUS MACADAM:

- (i) Aggregate impact value One test per 50 M3 of aggregate (max.30%)
- (ii) Flakiness index elongation index of aggregate. One test 50 cum of aggregate (max 30%)
- (iii) Grading of aggregates- Two tests per day plant both on the individual constituents and mixed aggregate from the dryer. (As per job mix formula).
- (iv) Water absorption of aggregate-initially one set of 3 representative specimens for each source of supply (max 2%)
- (v) Binder content- Periodic subjects minimum of two tests per day per plant. (As per job mix).
- (vi)Control of temperature of binder at regular close intervals says one hour and aggregate for mixing and of temp. Of binder at time of mixing shall the mix at the time of laying and be between 150c to 163c provided that rolling the difference in temperature between binder and aggregate at no time exceeds 14c the discharge temperature of mix shall between 130c to 160c rolling operations shall be completed in every respect before the te4mperature of mix falls below 100c,
- (vii) Rate of spread of mixed material regular control through checks of layer thickness.

#### 4. ASPHALTIC CONTRETE:

- (i) Aggregate impact value- One test per 50 cum of aggregate (max 30%)
- (ii) Flakiness index and elongation index of aggregate. One test per 50cum of aggregate (max 30%)
- (iii) Stripping value initially. One set of 3 representative specimens for each source of supply.

Subsequently when warranted by charges in the quality of aggregate.

(Minimum retained coating 95%)

- (iv) Water absorption. Do (max. 2%)
- (v) Mix grading. One set of test on individual constituents and mixed aggregate from the dryer for each 400 tones of mix subjects to a minimum of two tests per plant per day. (As per job mix design)
  - (vi) Stability of mix for each 400 tones of mix produced a set of 3 marshal specimens to be prepared and tested for stability flow value density and void content subject to a (Marshal stability not less than 820 Kg.)
- (viii)Control of one test of each 400 tones of mix subject and gradation of mix. To a minimum of two tests per day plant. Temperature controls same as that for BM.
- (viii)Rate of spread of mixed material.

(Regular control and through checks on the weight of mixed material and layer thickens).

(ix) Density of compacted layer- One test per 250 sqm.

#### **SPECIFICATION**

The Work shall be carried out strictly in accordance with.

- (A) The latest MORTH / UPPWD/UPJAL NIGAM/CPWD specifications for works.
- (B) Relevant ISI/ IRC standards for work not-coveredqunder Clause (a)
- (C) Material bearing ISI mark shall be used in works.
- (D) Non ISI material may be use only after the approval of the Engineer-in-Charge, in case ISI marked material is not available . or other wise specified in the nomenelatire the item given in BOQ of the Tender document.
- (E) Earth work in roads, WBM, BM/ SDC or MSS as per specification of MORTH (Third revision April 1955)/P.W.D.

**CONTRACTOR** 

**EXECUTIVE ENGINEER** 

#### fuelkl@fodld dk; ZgsqV@fcM i) fr ij fufonk dh fo'lkk 'kr\$A

dk, Z dk ule %डा० राम मनोहर लोहियानगर आवासीय के पाकेट 'सी.पी.' में एस. टी.पी. के पास निर्माणाधीन 384 एल0आई0जी0 भवनों के मध्य विकास कार्य।

- 1 निविदादाता को रू0 300/—लाख से अधिक आगणन लागत के कार्यों हेतु मेरठ विकास प्राधिकरण में पंजीकृत होना आवश्यक नहीं है। केन्द्र सरकार/प्रदेश सरकार में पंजीकृत अनुभवी फर्मे निविदा क्रय कर सकती हैं। रू0 300/—लाख से कम लागत के कार्यों हेतु निविदादाता को मेरठ विकास प्राधिकरण में वांछित श्रेणी में पंजीकृत होना अनिवार्य है।
- 2 निविदादाता द्वारा निविदा शुल्क के साथ कार्य की निविदा हेतु निर्धारित आवश्यक अर्हताओं की स्वप्रमाणित प्रतियाँ सीलबन्द लिफाफे में डालकर तकनीकी व वित्तीय बिड् दी जायेगी। तकनीकी बिड् के साथ निर्धारित निविदा शुल्क का बैंक ड्राफ्ट तथा धरोहर राशि की एफ0डी0आर0/राष्ट्रीय बचत पत्र संलग्न न करने की दशा में ऐसे निविदादाताओं को आगामी तीन माह तक निविदा प्रकिया में प्रतिभाग नहीं लेने हेतु डिबार कर दिया जायेगा।
- 3 लिफाफे के ऊपर कार्य का नाम एवं तकनीकी बिड् अंकित करने के उपरान्त ही rduhdh o forth; fcN-ds fyQlQsएक लिफाफे के अन्दर सीलबन्द कर निविदा बाक्स में डालना होगा। लिफाफे के ऊपर कार्य का नाम एवं तकनीकी बिड् अंकित न होने की दशा में उस लिफाफे को नहीं खोला जायेगा एवं इस सम्बन्ध में कोई क्लेम मान्य नहीं होगा।
- 4 प्राधिकरण द्वारा सर्वप्रथम केवल तकनीकी बिड् खोलकर निम्न अर्हताओं के सापेक्ष मूल्यांकन किया जायेगा। मूल्यांकन हेतु अर्हता के अनुसार निर्धारित अंकों का विवरण उनके सम्मुख दिया गया है। अर्हतायें निम्न प्रकार है:—
- 4.1(अ)निविदादाता द्वारा विगत **05** वर्षों में न्यूनतम एक अनुबन्ध के अन्तर्गत आमिन्त्रत निविदा की समान प्रकृति का कार्य सरकारी व अर्धसरकारी विभाग में सन्तोषजनक रूप से पूर्ण किया गया हो, जिसकी न्यूनतम लागत आमिन्त्रत निविदा की आगणन लागत के ,d frgbz के बराबर या अधिक हो। कार्यो का विवरण ik i&, पर आवश्यक अभिलेखों सिहत संलग्न करना होगा—
- 4.1(ब) निविदादाता द्वारा विगत **05** वर्षों में एक से अधिक अनुबन्ध के अन्तर्गत आमन्त्रित निविदा की समान प्रकृति के कार्य सरकारी व अर्धसरकारी विभाग में सन्तोषजनक रूप से पूर्ण किये गये हों, जिनकी न्यूनतम लागत आमन्त्रित निविदा की आगणन लागत के ,d frgbz के बराबर या अधिक हो। (अधिकतम 2 अनुबन्धों तक 5 अंक प्रति अनुबन्ध)
- 4.1(स) निविदादाता को वर्तमान समय में चल रहे समान प्रकृति के सरकारी व अर्धसरकारी विभाग में प्रगति में चल रहे कार्यों के किमन्टमेन्टस् का विवरण साक्ष्य सिहत संलग्न करना होगा। वर्तमान समय में आमन्त्रित निविदा की आगणन लागत के ,d frghz लागत का कार्य एक ही अनुबन्ध के अन्तर्गत प्रगति में होने पर। 10 val
- 4.1(द) निविदादाता को वर्तमान समय में चल रहे समान प्रकृति के सरकारी व अर्धसरकारी विभाग में न्यूनतम आमन्त्रित निविदा की आगणन लागत के **,d frglbZ**लागत के एक से अधिक अनुबन्ध के कार्य प्रगति में होने पर । (अधिकतम 2 अनुबन्धों तक 5 अंक प्रति अनुबन्ध) । **10 val**
- 4.2(अ) निविदादाता द्वारा विगत **05** वर्षों में किसी एक वर्ष का टर्न ओवर आमन्त्रित निविदा की आगणन लागत के बराबर या अधिक होने पर। निविदादाता को विगत **05** वर्षों के टर्न ओवर (चार्टेड एकाउन्टेन्ट से प्रमाणित बैलेन्स शीट) का विवरण संलग्न करना होगा।
  - 4.2(ब) निविदादाता द्वारा अवशेष **04** वर्षों में (4.2अ के अतिरिक्त) किसी वर्ष का टर्न ओवर आमन्त्रित निविदा की आगणन लागत के बराबर या अधिक होने पर। (2.5 अंक प्रतिवर्ष)। **10 val**

- 5.1(अ) निविदादाता को न्यूनतम निविदा लागत का **10** प्रतिशत धनराशि का राष्ट्रीयकृत बैंक द्वारा जारी Liquid Assets का प्रमाण–पत्र (3) माह से अधिक पुराना न हो) प्रारूप –बी पर संलग्न करना होगा। **15 val**
- 5.1(ब) निविदादाता के Liquid Assets निविदा लागत की 10 प्रतिशत से अधिक 30 प्रतिशत तक अतिरिक्त अंक (प्रत्येक 10 प्रतिशत पर 5 अंक)
- 6. निविदत्त दरें अभियन्त्रण विभाग द्वारा निर्धारित दरों से न्यून होने की दशा में सफल निविदादाता को स्पष्ट करना होगा कि वह कार्य को गुणवत्तापूर्वक किस प्रकार सन्तोषजनक रूप से पूर्ण करेगा। इसके लिए निविदादाता से अतिरिक्त परफोरमेन्स गारन्टी की एफडीआर / एनएससी पत्र जारी होने की दिनांक से एक सप्ताह के अन्दर जमा करनी अनिवार्य होगी। उक्त अविध में निर्धारित परफोरमेन्स गारन्टी जमा न करने की दशा में धरोहर राशि जब्त कर ली जायेगी। परफोरमेन्स गारन्टी डिफेक्ट लायबिलिटी पीरीयड (कार्य के अन्तिम बिल भुगतान की दिनांक से एक वर्ष) के उपरान्त कार्य सन्तोषजनक होने पर अवमुक्त की जायेगी।
- 7. निविदादाता को रू0 300 लाख या अधिक की लागत के कार्यों हेतु अनुभवी फर्मों को वैधता अविध के अन्तर्गत जिलाधिकारी द्वारा जारी चरित्र एवं कार्य की श्रेणी के अनुसार वांछित हैसियत प्रमाण पत्र की नोटरी द्वारा सत्यापित प्रति तकनीकी बिड़ के साथ संलग्न करनी अनिवार्य होगी।
- 8. निविदादाता को निविदा सूचना में अंकित धरोहर धनराशि की एफ0डी0आर0 / राष्ट्रीय बचत पत्र अधिशासी अभियन्ता, मेरठ विकास प्राधिकरण के पक्ष में बन्धक कर निविदा की तकनीकी बिड के साथ संलग्न करनी अनिवार्य होगी। जिस ठेकेदार द्वारा धरोहर राशि उपरोक्तानुसार निविदा की तकनीकी बिड के साथ संलग्न नहीं की जायेगी, उसकी निविदा पर विचार नहीं किया जायेगा।
- 9. निविदादाता फर्म के पास कार्यरत स्टाफ प्रारूप —सी पर तथा उपलब्ध मशीनरी एवं ''टी एन्ड पी'' का विवरण प्रारूप—डी पर संलग्न कर उक्त आशय का शपथ पत्र भी तकनीकी बिड के साथ प्रस्तुत करना होगा।
- 10. निविदादाता को तकनीकी बिंड के साथ इस आशय का एक शपथपत्र संलग्न करना अनिवार्य होगा, जिससे यह पुष्टि हो कि उसे पूर्व में कोई कार्य समय से पूर्ण न करने अथवा विशिष्टियों / गुणवत्ता के सम्बन्ध में दण्डित / सचेत नही किया गया है।
- 11. निविदादाता को इस आशय से शपथ पत्र तकनीकी बिड् के साथ संलग्न करना होगा कि निविदादाता की फर्म/कम्पनी अथवा उसका प्रत्येक साझेदार/ निदेशक सम्पूर्ण भारत में कही से भी सजायाफ्ता/दिवालिया/बकायेदार अथवा ब्लैक लिस्टेड नही है।
- 12. निविदादाता को इस आशय से शपथ पत्र तकनीकी बिड् के साथ संलग्न करना होगा कि निविदा के साथ संलग्न समस्त प्रपत्र जैसे बैलेन्स शीट, कार्य पूर्णता प्रमाण पत्र व टर्न ओवर, आदि सत्य व सही हैं।
- 13. निविदा प्रपत्र में त्रुटिपूर्ण सूचना देने अथवा गलत शपथ पत्र प्रस्तुत करने पर प्राधिकरण द्वारा उसकी धरोहर राशि व अन्य बधंक धनराशि जब्त कर ली जायेगी ।
- 14. जिन निविदादाताओं को तकनीकी बिड् के मूल्यांकन में 60 प्रतिशत से अधिक अंक प्राप्त होंगे, केवल उन्हीं ठेकेदारों से वित्तीय बिड् का लिफाफा निर्धारित दिनांक को खोला जायेगा। लिफाफे के ऊपर कार्य का नाम एवं वित्तीय बिड् अंकित न होने की दशा में उस लिफाफे को नहीं खोला जायेगा एवं इस सम्बन्ध में कोई क्लेम मान्य नहीं होगा।
- 15. तकनीकी बिड् में सफल ठेकेदारो के चयन के उपरान्त, सफल ठेकेदारो को वित्तीय बिड खोलने की तिथि व समय हेतु, अलग से सूचित किया जायेगा।

#### vfuok; Z 'kr 🌉

16. प्राधिकरण में वर्तमान में चल रहे समस्त कार्यों की वर्तमान प्रगति प्रारूप 'ई' पर अंकित करनी अनिवार्य होगी। उक्त सूचना अंकित न होने की दशा में निविदा पर विचार नहीं किया जायेगा।

- 17. विद्युत सम्बन्धी कार्यों हेतु निविदादाता को संलग्न अनुभव प्रमाण पत्रों के साथ सम्बन्धित कार्यों के 'कार्य पूर्णता प्रमाण पत्र', नगर निगम व पी०वी०वी०एन०एल० को हस्तान्तरण सम्बन्धी प्रमाण पत्र सत्यापित कर संलग्न करना अनिवार्य होगा। अन्यथा निविदा पर विचार नहीं किया जायेगा।
- 18. किसी बिड् को बिना कारण बतायें स्वीकृत करने अथवा निरस्त करने का अधिकार उपाध्यक्ष, मेरठ विकास प्राधिकरण को होगा।
- 19. हॉटिमक्स प्लान्ट से सम्बन्धित कार्य हेतु, निविदादाता के पास हॉटिमक्स प्लान्ट के स्वामित्व के साथ—साथ, प्लान्ट को कार्य स्थल से 50 किमी0 की परिधि के अन्दर स्थापित होना अनिवार्य होगा। किराये/लीज पर लिये गये प्लान्ट के आधार पर दी गयी निविदा पर विचार नहीं किया जायेगा।
- 20. चार मंजिल से अधिक ऊँचाई के भवनों के निर्माण हेतु, निविदादाता को 15 मीटर ऊँचाई से अधिक (पॉच मंजिले व अधिक) के बहुमँजिले भवनों के निर्माण कार्य, जिसमें लिफ्ट लगाने का कार्य एवँ 'स्टिल्ट / बेसमेन्ट पार्किंग' का कार्य भी सम्मिलित हो, के सन्तोषजनक रूप से पूर्ण किये जाने सम्बन्धी प्रमाण पत्र तकनीकी बिड् के साथ संलग्न किया जाना अनिवार्य होगा।
- 21. चार मंजिल से अधिक ऊँचाई के भवनों के निर्माण हेतु निविदादाता को न्यूनतम 15 मीटर ऊँचाई से अधिक (पॉच मंजिले व अधिक) भवनों के निर्माण में अग्नि शमन सम्बन्धी कार्य के सन्तोषजनक रूप से पूर्ण किये जाने के सम्बन्ध में अग्नि शमन विभाग द्वारा जारी प्रमाण पत्र तकनीकी बिड़ के साथ संलग्न किया जाना अनिवार्य होगा।
- 22. चार मंजिल से अधिक ऊँचाई के भवनों के निर्माण हेतु निविदादाता को न्यूनतम 15 मीटर ऊँचाई से अधिक (पॉच मंजिले व अधिक) भवनों के निर्माण में आन्तरिक विद्युतीकरण कार्य के सन्तोषजनक रूप से पूर्ण किये जाने के सम्बन्ध में विद्युत सुरक्षा निदेशालय द्वारा जारी प्रमाण पत्र तकनीकी बिड़ के साथ संलग्न किया जाना अनिवार्य होगा।

vf/kW h vfHc, Urk

#### APPENDIX +Aq

S.No.	Name of work	Total	Date of	Stipulated dat	Actual	Whether
		value of work done Rs. in lacs	start	of completion	Date Completic	Compensation Levied for delay
1						
2						
3						
4						
5						

The performance of the firm has been found to be good and they are considered capable of executing the works of magnitude up to Rs  $\tilde{0}$   $\tilde{0$ 

The financial position of the firm appears to be sound and they are capable of executing works in accordance with the specifications and with specified time schedule.

The dealings of the firm have been observed to be cordial reasonable and they are not litigious.

Dated SIGNATURE of
Officer-in-Charge of the work
Name of Officer
Official Seal

If any tenderer submits the experience certificate of on going work, then amount of work done against the agreement is to be mentioned clearly in the certificate.

### APPENDIX Bq

The is to certify that dealings of M/s õ õ õ õ õ õ õ õ õ õ õ õ õ who have beeb dealing with us for
ast ỗỗỗỗỗỗỗỗỗỗỗỗỗỗỗỗỗỗỗỗ years are satisfactory. On the basis off information available with us
we assess their Liquid Assets not less than Rs. õ õ õ õ õ õ õ õ õ õ . Lacs.
SIGNATURE OF MANAGER OF THE BANK
Seal of the Bank

Date

#### APPENDIX £q

I/We	õõ	õ	õ	õõ	õ	õ	Õ	õ	õ	õĉ	õ	õ.	S/o	õ	õ	õ	õ	õ	õ	õ	õ	 Partners/	Aut	horis	ed	person	M/s
õõõ	õõ	õ	õć	ŏõ	õ	õ	õ	õ	õ	õĉ	i a	applic	ant of	õ	õ	õ	õ	õ									

õõõõõõõõõõõõõõõõõõõõon on the post and from the dates mentioned against them.

S.No.	Name and Address	Technical Qualification	Post held regular	Date of Employment	Details of Experience
		Qualification	regulai	Employment	Ехрополос
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

I / We understand that well experienced one graduate and one Diploma Holder / Civil Engineering as directed by E/I will have to be deployed by us on the work through out, in case we are entrusted with execution of the work in question.

I / We further understand that in the even for non-presence of such Engineers the Meerut Development Authority shall deduct @ Rs. 10,000 (Ten thousand) or Rs. 6,000 (Six thousand) as the case may be, per month from our bills which will not be refundable.

I / We further understand that the decision of Engineer-in-charge of work regards to presence and / or absence of our Engineer from the work shall be final and binding upon us.

SIGNATURE OF APPLICANT

**SEAL** 

(NOTARY PUBLIC)

#### **APPENDIX Dq**

L	/ W	lе	õ	õ	õ	õ	õ	õ	õ	õ	õ	õ	õ	õ	õ	S	3/0	S	hr	ίõ	õ	õ	õ	õ	õ	õ	Õ	õ	Ĉ	ŏô	Š	õ	õ	õ	õ	õ	õ	Appli	cant	of				
õ	õ	õ	õ	õ	õ	õ	õ	õ	õ	õ	õ	õ	. (	or	õ	õ	õ	õ	õ	õ	õ	õ	õ	õ	õ	õ	õ	õ	õ	õ		. F	Pa	rte	er	(S	) A	uthoris	sed p	oerso	n (	(S)	of	M/s
õ	õ	õ	õ	õ	õ	õ	õ	õ	õ	õ	õ	õ	õ	õ	õ	õ	õ	õ	)																									

Applicant for pre-qualification for the above noted work in Meerut Development Authority here by certify that I/We possess the following machinery, tools and plants, centering and shuttering, all in good working conditions.

Particulars of machinery Tools, plants centering and shuttering	No.	Estimated cost (Rs.)	Approximate age in Years and months

I /We undertake that above machineries and centering and shuttering material will remain in good working condition and in useable from throughout the currency of work.

I/We further undertake, that if, there is any reduction in the equipment, below the limit required for perqualification, I/We will inform Engineer- in-charge, Meerut development Authority to whom application for prequalification is being made, within 3 days of its occurrence and arrange to make it up within another one week, failing which, the MDA will be free to impose any penalty that it may deem fit, which will be final and binding upon me/us.

**APPLICANT** 

**SEAL** 

(NOTARY PUBLIC)

On Stamp page (minimum denomination Rs. 10.00)

#### **ANNEXURE -1**

Tender invited by Executive Engineer	
Meerut development authority, Meerut (U	.P.)
Tender notice No	dated õõõõõõõ
Name of tender/ work õ õ õ õ õ õ õ õ õ	$\tilde{o}\ \tilde{o}\ \tilde{o}$
$\tilde{0}$	$\tilde{0} \tilde{0} \mathbf{$

In consideration of the Meerut Development Authority having treated tenderor to be an eligible person whose tender may be considered the tenderor hereby agrees to the conditions that the proposals in the above invitation shall not be withdrawn within three months from the date of opening of the tender and also to the condition that in case after the tender as withdrawn his proposal within the stipulated period, the earnest money deposited by him shall be forfeited by the Meerut Development Authority. I hereby agree to the effect that if subsequent to the submission of my tender, a modification is made by me in respect of contents of my tender which is not acceptable to the Meerut Development Authority, it may be DEEMED as withdrawn of my proposal and consequently I am liable for action as above.

I abide by all the rules and regulations of Meerut Development Authority, Meerut.

Date õ õ õ õ õ õ õ õ õ Signed by Conctractorõ õ õ õ õ õ õ õ õ õ ... (seal of the firm)

**Important Notice**: This undertaking is to be signed by the contractor on stamp paper of Rs. 10/only. This is to be submitted along with the tender, failing which the tender is liable to be rejected. This undertaking shall be attested from Public Notary.

### TENDER DOCUMENT

**VOLUME: II** 

### **FINANCIAL BID**

#### TenderNo-10

Name of Work: – डा० राम मनोहर लोहियानगर आवासीय के पाकेट 'सी.पी.' में एस. टी.पी. के पास निर्माणाधीन 384 एल०आई०जी० भवनों के मध्य विकास कार्य।

Note: The tenderer must read carefully every page of the details, conditions of technical bid and submit in the sealed endvelop of technical bid after signing of each page of the conditions

Year -2015-16

**Executive Engineer** 

### FINANCIAL - BID

### **Tender No-10**

Name of Work : – डा० राम मनोहर लोहियानगर आवासीय के पाकेट 'सी.पी.' में एस. टी.पी. के पास निर्माणाधीन 384 एल०आई०जी० भवनों के मध्य विकास कार्य।

I/We hereby tender for the execution above mentioned work according to the SCHEDULE - G (Bill of quantites), Specification and terms and conditions referred to in the tender documents with in time-frame as mentioned and in accordance with the specification, design, drawings and instruction in writing and with such materials as are provided for and in all other resects in accordance with such conditions sas for as applicable.

I/We hereby agree to the percentage mentioned (Below/Above) on the printed rates of the Bill of Quantities for the execution of the work.

- 1. The Quantities are liable to wide variation upto 10% extent for which no claim whatsoever shall be entertained,
- All extra items shall be executed on the same rates as % percentage tendered by the contractor section wise on the basis of schedule of rates at the time of inviting the tenders or the current schedule rates which ever is lesser.
- 3. All works shall be carried out as per Most C.P.W.D./U.P.P.W.D detailed specification and amendments made therein from time to time.
- 4. I.T./Trade Tax/ Labour cess as admissible time to time will be recovered from the gross amount of the bills. And no claim will be considered to contractor.
- 5. In the event of any dispute Meerut courts will have exclusive jurisdiction and no suit shall be lie in any other court outside Meeut District.
- 6. The contractor will enclose stamp paper of Rs. 100/- and a revenue stamp of Rs. 1/- duly signed by him with tender document in which he will give an undertaking that he is abide to maintain his commitment of quoted rates upto the validity period of tender. If he ignore with his

	quoted rates with in tne validity period, his earnest money will be
	forfitted enclosed with the tender and no claim will be considered for it.
7.	I/Wehereby offer. To
	execute the above work on% (in figure)
	(in words)Above/below
	the rates printed on the attached bill of quantity (B.O.Q.) of the works.
	POSTAL ADDRESS:-

A.E. M.D.A. Officer Opning Offcer Recommending

Tender Tender

Sign. of Contractor,

#### ADDITIONAL CONDITONS OF THE CONTRACT

- 1. Each page of the bill of quantity. Specification and condition should be signed by the contractor.
- 2. Tenderors should given their rates after careful examination of site of work. Drawings can be seen in the office during working hours. Drawing and specification can however be modified without entitling the contractor to any compensation due to change made there in. Change of site will also not entitle the contractor to any compensation.
- 3. The contractor must take late consideration, all fluctuations in rates of labour and materials during currency of the work, No claim what so ever on this account shall be entertained.
- 4. The units of ration as shown in the bill of quantities should be carefully seen as refer, once give by the contractor shall, remain unchanged and no execute on any account will be entrtained after the tender box has been closed.
- 5. RIGHT OF REJECTION: The department reserves the right to reject any or all the tendors without assigning and reason for doing to. It also reserves the the right to allot either a part of the work or the whole to any tendors, should the sold tenderors refuse to sign the bond. If he is given a portion of work, his proportionate earnest money shall be forfieted and his tender rejected.
- 6. INSPECTION OF THE SITE AND CHARAOTER OF SOIL:- The contractor shall inspect and examine the site and its surroundings and shall satisfy before submitting his tender as to the nature of the grounds or subsoils and specially about the through and on which excavation is to made foundations to be built not other work to be executed. In his interest he should make sure of the position of quarries, topography of the site, availability of food stuffs, labour and materials and other ammolleles before tendering. no claim for additional work or extra due to any of the above reasons will be allowed as specified in general specifications.
- 7. LINES AND LEVELS: The contractor shall be solely responsible for setting out the work and for the correctness of the possitions levels dimensions and aruments according to the plants and shall provide all necessary assistance instrument page atnkon, pollon and other materials required for the purpose. He will keep his own qualified staff and instruments to do the job. The tendered rate shall be deemed to included all this.
- 8. TOOLS AND PLANTS: The contractor shall arrange of his own tools and plants required for the proper execution and completion of the work within the specified time. If any equipment is issued departmentally, rent will be recovered from the contractors bill at rates and terms to be entertained by the contractor from the Engineer in charge in writing etc.
- 9. WATCH AND WARD: The contractor shall in connection with the the work provide and maintain at his own cost all guard, fencing and watch and ward required for proper execution and safety of materials etc.
- 10. MEASUREMENTS: The Engineer in charge shall accept otherwise stated ascertain and determine by measurements the value in accordance with the contract of the work done. He shall when he require any part or parts of the work to be measured, give notice to the contractor. Who shall forth with attend or send on authorised agent of representative with the necessary labour and implements to assist the official mesauring the work in making such measurement and shall furnish all particulars required. Should the contractor fall, to attend or omit to send such Agent or representative, than the measurement made by the Engineer In charge of any official under him of approved by him, shall be taken to be the correct measurement of the work.
- 11. MATERIALS AND APPLIANCES: All reasonable facilities will be provided by the Authority to the contractor for procuring of controlled materials but the failure, on the part of the contractor to get the materials in pursuance to any permit etc. Issued on behalf of the Authority, shall not serve any ground for not carrying out his obligation under the contractor.
- 12. TIME OF WORKING: The contractor will be required to so that the usual working hourse are adhared to No work should be done in night without the permission of the Engineer in charge except when its absolutely necessary for the saying of life or property or for the safety of the work in which case the contractor shall immediately seek advice of the Engineer in charge Some times however, some work. It may be directed by Engineer in charge will have to be carried out in the night and no extra payment shall be made to the contractor on this account.
- 13. PROGRAMME AND RETURNS TO BE FURNISHED: As soon as pencil cable but not less than one month after the acceptance of his tender the contractor shall, if required to submit to Engineer in charge for his approval a program showing the order of procedure and method in which he proposed to carry out the works and shall

whenever required by the Engineer in charge for his information particulars in writing of the contractor arrangement for the carrying out of works.

- 14. DRAWING AND THEIR OWNER SHIP: The acts of working drawing be got issued by the contractor from the office after his tender has been accepted., Contractor shall keep one set of drawing in the good condition ready at site and available to department Engineer staff. On completion of the work the contractor will have to return these drawing to the office.
- 15. EXTRAITION OF WORKS: The cost of extra items of the works necessitated during the execution of the work shall be determined as stated In MDA conditions of contract.
- 16. CLAIMS: The contractor shall submit to the executive engineer once in very month an account giving full and detailed particulars of all claims for any additional expenses to which the contractor may consider him self entitled and of the extra and additional works order and executed during the proceeding month. No Claim for payment for any scuh work shall be considered which has not been included in such particulars.
- 17. DEFAULT OF CONTRACTORS COMPLIANCE: Defence of the instructions of the Executive Engineer in charge on the part of the contractor will make the contractor liable to be terminated.
- 18. Will full in subordination or disobedience to the orders of the Engineering staff whether alone or in combination with another shall be considered to be an act of misbehaviour and penalty for this as decided and improved by the Executive. Engineer shall be final and binding on the contractor.
- 19. CLEARANCE OF SITE ON COMPLETION: The contractor shall at all times keep the premises free from accumulated was to materials or rubbish caused by his employees on the works and on completion of the work he shall clear away and removes from site all construction wastes, surplus materials, rubbish and temporary works of any kind and fill up borrow pits dug by him. He will leave while of the site and work clean and in a workman like conditions to the entire satisfaction of the Engineer in charge as provided in M.D.A. condition of contract. Nothing extra shall be paid to the contractor for this clearing.
- 20. FOSSHS ETC: All found, coins articles of value of antiquity and other remains of things of geological or archeological interest discovered on the site of the work shall be given the Authority by the contractor and shall be decency absolute property of the Authority.
- 21. SUSPENSION WORK: The contractor shall on the written order of the Executive Engineer, suspend the progress of the works of any part here of for such time and in such manner as may be considered necessary and shall during such suspension property protect and accrue the work so far as is necessary in the opinion of the Executive Engineer. Nothing extra shall be paid to the contractor. If such a suspension is necessary for the proper execution of the work by reasons of the weather or by some default on the part.
- 22. SUB STANDARD WONK: concrete of strength below 80% of the required strength (as determined actual tests) shall not be accepted concrete of strength not below 80% of required strength may be accepted as sub standard work at suitably reduced rates provided the use of this under strength concrete is confirmed to such members and in such quantities that the safety of the structure is not end an greed, the acceptance, of such sub standard work will be at the entirely discretion of Executive. Engineer and contractor shall not claim as a matter of right. The decision of Executive. Engineer shall be final regarding reduction of rates for such sub standard works.
- 23. If required the contractor shall provide at his own expenses suitable accommodation for his employee including adequate sanitary arrangements and water supply.
- 24. The quantities shown in the bill of quantities are approximate and liable to variation to any extent on either side and the contractor will not be entitled to any extra rates or compensation due to any change in the quantity of the work to be done. Few items may be required to be omitted and contractor shall, not entitled to claim and profit on this account.
- 25. Joint tender will not be considered unless the film is registered one or the person signing the tender possesses the power of attorney of each other and the partners shall be considered as well as Individually or the tender calling which the tender is liable to be rejected and earnest money forfelted.
- 26. No more than one tender should to be submitted by one contractor or by one firm of contractors.
- 27. All tendered reates shall be considered to include all jobs as mentioned in the detalled specifications attached.
- 28. After acceptance of the tender the M.D.A conditions of contract with necessary amendments will be attached with the bond and the same will be binding on the contractor.

- 29. The work of electric fittings shall be taken in hand when he building work has sufficiently advanced. The contractor will have to afford all facilities to other contractor in the executive of their work so that the entire work may proceed in the execution of their work so that the entire may proceed smoothly. No compensation on this account shall be allowed.
- 30. When opening the tenders the rates shall be read out to all contractors. Who are present.
- 31. The white lime required for the work shall be brought to the site in unsiacked conditions and sinchod property and to specification on the work after approval of the Engineer in charge or his representative.
- 32. All building materials arranged by the contractor shall be subject to the approved of the Engineer in charge and rejected materials if any, will have to be removed by the contractor with in three days from the the site of the work otherwise a penalty of Rs. 50 per day may by imposed on him till the materials in questions are removed.
- 33. The materials to be supplied by the department as per schedule %+appended at the rates mentioned there in shall be supplied to the contractor in such lots and at such time as the Engineer in charge desired. The contractor should send his requirement will on advance to the Engineer In charge. The materials will be supplied in time as far as possible but in case of any materials belong not available no claim will be entertained in case of material in schedule %+ the contractor will use only those material which have been issued by the /Department unless directed by the Engineer in charge and approved by the executive Engineer.
- 34. Other materials not covered by the schedule %+ can also be issued to the contractor at the discretion of the Executive Engineer In charge if available at the current market rate of stock rates which ever is higher.
- 35. All materials issued to the contractor will have to bestnoked and stored properly at the site of the work and a proper account will have to be maintained by the contractor in accordance with the instructions of the engineer in charge etc. so that checking can be done when necessary. If any surplus materials are left after the completion of the work it shall put to disposed or removed by the contractor unless he receives permission in writing from the Engineer in charge.
- 36. An order book will be kept at the site of the work in which instruction on may be recorded by the Engineer in charge or his representative. The contractor or his authorized Agent will be required to sign the order book daily in acknowledgement of the instructions. In case the contractor refuse to do so the instructions written there in shall be binding on the contractor.
- 37. VERBAL INSTRUCTIONS ISSUED BY THE OFFICERS: Any verbal instruction issued by officers from time to time in connection with; change in design or specification which the contractor thinks entitles him for extra payment shall be got confirmed in writing by the contractor. Failure to do this will not account entitle him extra payment.
- 38. The contractor shall be responsible to carry out the work according to the drawing attached with the contract bond drawing of details given by Engineer I/C. Incase the contractor executes the work of larger dimension than shown in drawing he will only be paid for as per drawings in case work executed is of less dimensions and not covered by the tolerances allowed, It will be at the discreation of Engineer Incharge to accept the work or to reject. In case the work to be accepted the payment will be made as per dimensions actually executed.
- 39. The contractor before commencing the work shall (a) part in a conspineous place at the hole of work notice, going the proper of wages which have been certified by the Engineer in charge.
- 40. The contractor shall be bound by the rules made by the Govt. with regard to the period for which wages have to be paid and deduction from wages.
- 41. The contractor shall be bound to give preference to ex-service man where available. The nearest sub regional employment exchange may be consulted regarding available of such man.
- 42. The tender rates shall includes all quarrying charges, royalty screening tools and plants carriage of materials to the site stacking and removal of all rekected materials, all taxes& water arrangement etc.
- 43. Condition of M.D.A conditions of contract manual from 79/80/81/82 will also be applicable and will form part of the contractor.

- 44. No claim for extra payment on account of delay in the supply of material or machines to be issued by the M.D.A will be entertained.
- 45. The contractor must write there correct and complete postal address in tender and arrange to take the delivery of all letter. If any letter achieved back undelivered it will be contractor responsibility and contractor shall be bound for such action as may be written in the content of such letter. Any change of address must be intimated to this office for which he should obtain acknowledgements. The contractor or his agent will not refuse to delivery of letter at the site of work in M.D.A office.
- 46. Stamps duty as required on the contract deed will be borne by the contractor.
- 47. The. M.D.A. Shall have the right of accept at reduced rate sub standard and defective work provided that the sub standard or defective work out considered to be seriously defective by the Engineer In charge and the rates of works so accepted will be suitably reduced by the Executive Engineer to compensate the M.D.A and such reduction will be at the entire discretion of the Executive Engineer and shall be final and binding on the contractor.
- 48. The work must comply with the relevant U.P. PWD detailed specifications and relevant latest standards of Indian standard codes, as Specified in regarding applicability interpretation or any dispute about specifications shall be final binding on the contractor. The tenderor shall be deemed to cover the following where required to be done and no extra payment for these shall be made.
  - (a) Cutting of existing roads and making it good after completion of work in original shape and with specification of broken work.
  - (b) Cutting and making holes to the brick work or roofs (RB or RCC) or floors or plaster and making good the same after completion of the work to original shape and with specification of broken work.
  - (c) Making of pillars to first class brick in 1:3 cement and approved coarse send mortar for finding water supply lines of water storage rank as desired by the Engineer in change.
- 49. (d) Painting two coals of approved paint on all exposed faces either or H.C.I. pipe lines.flushing classes bracket and other fittings and M.S. banks and girders etc.
- 50. (e) Load jointing in HCL Boll and vent pipes lead shall be filled up to 2 cm minimum extra than chaulking by jute.
- 51. (f) The supervising staff can check by getting the lead joints opened upto 20% of all the joints the same shall have to be referred by the contractor at his own cost. If any joint found with lesser quantity of lead or cracks in lead jointing the penalty as deemed by the Engineer Incharge shall be imposed to all joints.
- 52. The contractor shall have to dispose of all surplus earth, and rubbish etc. away from the building from the site of the work as and where directed by the Eh. In charge at the time of the completion.
- 53. All the concealed pipe shall be tested as per direction of Engineer in charge and shall be concealed only when it is approved. The testing charges and equipment etc. for the same be borne by the contractor. The contractor shall be responsible for the leakage till the 10% security is released.
- 54. The tendered rate shall include all the local and other taxes, water charges, carring etc. No claim shall be entertained on such account the quantities are liable to vary on either side to anyextent for which no claim shall be entertained.
- 55. After laying and joining, the S.W. and HCL pipes and fittings shall be inspected and got tested any joint found leaking shall be done and all leaking pipes removed and replaced without extra coat.
- 56. The tendered rate shall be deemed cover the charges of making connection with water tanks and supply pipes etc. for which nothing extra shall be paid.
- 57. The floor and walls etc. cut for proper completion of the work shall be repaired and finished to its original specification.

- 58. The GI pipe work including fitting shall be tested to pressure as specified in relevant IS code to ensure that pipes have proper threads and proper materials. All leaky joints shall be made leak proof. Smoke test shall be carried out for HCL pipe line work as provided in the specifications. The S.W pipe shall be tested for 5 mtrs. Head of water nothing extra shall be paid for all these testing.
- 59. For the material supplied by the department proper accounts will have to be maintained. For cement double lock system will have to be followed.
- 60. Floor trap, nahani trap if any and W.C. shall be paid at the reduced rates i.e 90% of the rate till got tested against leakage to the satisfaction of the engineer incharge.
- The contractor has to carry out the work of testing twice once before taking the final measurement and secondly any time during period of a month from the date of expiry of contract i.e maintuenance period of a month payment, for this 10% security shall be refunded only after the satisfactory comition of work, test maintenance period.
- No payment will be made to contractor for qutting charge and its repair in brick work after completion of work for fixing percaste or cast insite, RCC shelves and no claim on this account shall be entertained.
- The lambs of the doors, windows shall be finished with cement mortar 1:2:2: (1 cement, 2 coarse sand, 2 jamuna sand) against the 12 mm and 15 mm thick plastering items of bill of quantities but nothin extra will be pald on this account.
- No clain will be made to contractor for damage to building works or materials caused by rain, any natural clainities or any other reason what so ever during the execution of the work and no such claim on this account shall be entertained.

I/We have carefully read the above conditions and agreed to abide by them.

**EXCUTIVE ENGINEER,** 

	BILL OF QUANTITY			
Nan	ne of work- Internal Development works among 384 for	ur store	eyed	
	S Houses in Pocket- CP, Near S.T.P.at Lohia Nagar s		•	
S.No	DESCRIPTION OF WORK	Qty	Rate	Unit
•	ROAD WORK			
Item No.1	Earth work in cutting or in embankment in ordinary soil excavation to be in the form of regular pits not exceeding 0.50M In depth & earth work in embankment to be in 20 cm. Layers including remming & dressing the surface to requiredLevels & slops & also i/c1.50M. lift & 30M.lead . The earth from cutting to be used in making embankment or to be deposited as spoil banks with-in 30M.distance as directed by theEngineer in charge. [SI No.253(a)]	2616.0 0	53.00	Cum
Item No.2	Cartage of earth required for filling up to a distance of 5.00Km including loading & unloading of earth	2616.0 0	116.15	Cum
Item No.3	Mechanical compaction to achieve 95% proctor density including arrangement of water settlement and supply of all T & P charges including roller Charges and its fuel chargs with diesel for output of 325 cum per day (S.I.No.260-a)	2616.0 0	20.00	Cum
Item No.4	Cement Concrete with 4 cm. guage approved stone ballast,app. C.sand & cement,in proportion of 8:4:1 including supply of all materials,labour,Tools & plants etc.required for proper completion of the work.[SI. No.281]	195.00	4050.00	Cum
Item No.5	Cement Concrete with 2 cm.gauge approved stone grit, coarse sand & cement in the proportion of 4:2:1 i/c supply of all materials, labour T&P etc. required for Proper completion of the work. [SI.No.279(a)]	204.00	5150.00	
Item No.6	Concrete with 4 cm. guage brick ballast, fine sand & cement, in proportion of 12:6:1 in foundations and under floors including supply of all materials, labour, Tools & Plants etc. required for proper completion of work[SI. No.273]	269.0	2300.0	Cu m
Item No.7	Item No.20/R.S.I.No.2(Road)-P/L 80mm thick I-shaped mechanically compressed interlocking tiles (New Item No.5)	161.00	657.00	SQM

Item No.8	Item No.20/R.S.I.No.2(Road)-P/L 60mm thick I-shaped mechanically compressed interlocking tiles (New Item No.6)	2524.0 0	529.00	SQM
Item No.9	Dag belling 15 cm (6") deep in one line aligned with flags and jhandies as directed by the Engineer-in-charge.[SI.No.760]	371.00	0.45	Rmt
Item No.1 0	M-150 Brick Work in one cement & six fine sand of 1.25 F.Mmorter in foundation [SI.No.303]	27.00	3700.00	Cum
	For Parks			
Item No.1	Excavation in foundation in ordinary Soil(Loam,clay or sand)including lift upto 1.50M. & including filling watering &ramming of excavated earth into the trenches or into the space between the building & the sides of the foundation trenches or into the plinth & removal & disposal of surplus earth as directed by the Engineer-in charge upto a distance of 30M. from the foundation trenches.[SI No.251(a)]	244.00	63.00	Cum
Item No.2	Concrete with 4 cm. guage brick ballast, fine sand & cement, in proportion of 12:6:1 in foundations and under floors including supply of all materials, labour, Tools & Plants etc. required for proper completion of work[SI. No.273]	49.00	2300.00	Cum
Item No.3	M-150 Brick Work in one cement & six fine sand of 1.25 F.Mmorter in foundation [SI.No.303]	106.00	3700.00	Cum
Item No.4	Cement Concrete with 2 cm.gauge approved stone grit, coarse sand & cement in the proportion of 4:2:1 i/c supply of all materials, labour T&P etc. required for Proper completion of the work. [SI.No.279(a)]	5.00	5150.00	Cum
Item No.5	First class Brick Work in 1:6 cement & Fine sand of 1.25 F.M mortar for one brick thick wall in super structer [SI.No.305+309+310]	7.00	4030.00	Cum
Item No.6	Same as above in Item 5 but for half brick thick wall in 1:4 cement & fine sand mortar [S.I.No.304+309+310(A)]	76.00	4365.00	Cum
Item No.7	12mm thick plaster with cement and fine sand of 1.25 F.M. mortor in 1:4 over brick work internal side. [SI.No.584]	720.00	115.00	Sqm
Item No.8	Same as in Item No.7 But for Rough surface. [S.I.No.596]	360.00	12.00	Sqm
Item No.9	Finishing wall with water proof cement paint of approved make and quality on new work with two coats to give an even shade including supply of all materials, labour, T&P etc. required for proper completion of work. S.I. No. 660]	820.00	63.00	Sqm
	Const. of Drain			

Item No.1	Excavation in foundation in ordinary Soil(Loam,clay or sand)including lift upto 1.50M. & including filling watering &ramming of excavated earth into the trenches or into the space between the building & the sides of the foundation trenches or into the plinth & removal & disposal of surplus earth as directed by the Engineer-in charge upto a distance of 30M. from the foundation trenches.[SI No.251(a)]	170.00	63.00	Cum
Item No.2	Concrete with 4 cm. guage brick ballast, fine sand of 1.25 F.M. & cement, in proportion of 10:5:1 in foundations .[SI. No.274]	34.00	2450.00	Cum
Item No.3	M-150 Brick Work in one cement & Six fine sand of 1.25 F.Mmorter in foundation [SI.No.303]	81.00	3700.00	Cum
Item No.4	Cement Concrete with 2 cm.gauge approved stone grit, coarse sand & cement in the proportion of 4:2:1 i/c supply of all materials, labour T&P etc. required for Proper completion of the work. [SI.No.279(a)]	16.00	5150.00	Cum
Item No.5	12mm thick plaster with cement and fine sand of 1.25 F.M. mortor in 1:4 over brick work internal side. [SI.No.584]	355.00	115.00	Sqm
Item No.6	R.C.C Work with cement,approved coarse sand & 2cm. Gauge approved stone grit in proportions of 1:1.5:3 in slabs exclud supply of reinforcement & its bending,but i/c its fixing & binding the same with 24 B.W.G.G.I.binding wire & including necessary centering & shuttering etc. & supply of all materials,labour ,Tools & plants etc.required for proper completion of the work i/ccost of binding wire.The rate excludes making of drip course which shall be paid extra.[SI.No.284]	6.30	6200.00	Cum
Item No.9	M.S.(tor steel or plain)in plain work such as R.C.C.or R.B.work i/c bending for proper shape& including supply of steel & its wastage,bend,hooks & authorized overlapping shall be measured & i/c cost of binding wire.[SI.No.504]	6.20	5900.00	QtI
	Laying Water Line			
Item No.1	Excavation of pipe laying in ordinadry soil including, lift upto 1.5 m.and Lead upto 30m. And including refilling the excavated trench, watering, ramming & removal of surplus earth from the site with in a distance of 50m. As Dir. By E I C.	235.00	63.00	Cum
Item No.2	Supply, Laying Jointing, testing & commissioning of H.D.P.F. pipes(PE-80) as per IS-4948 including transportion upto the site			

1	A- 110mm. Dia H.D.P.F. pipe	395.00	504.00	Rmt
Item No.4	Supply of ISI marked cast iron double flanged Sluice Valve as per Is; 14846-2000 with SS system,bolts,nuts 3mm thick rubber gasket	3.00	2575.00	Each
Item No.5	Supply of ISI marked cast iron 80mm dia Fire Hydrent as per Is; 14846-2000 with SS system,bolts,nuts 3mm thick rubber gasket	2.00	1200.00	Each
Item No.6	Supply of ISI marked cast iron screwed down type of Air Valve as per Is; 14846-2000 with SS system,bolts,nuts 3mm thick rubber gasket	2.00	1260.00	Each
Item No.7	Construction of brick masonary chambers of size ( 60x60x1.00) m. for making connection & inspection 1/c. cost of excavation of earth. Base conc. 1:6:12 of 10 cm. thick & brick work1:4 in fine sand & plaster in 1:3 cement & c. sand mortar. & R.C.C slab 10 cm.thickness having reinforcement 10mm. M.S. bars of 7.44 kg. weight .Complete.in all respect.	7.00	5248.00	Each
Item	Carting,Laying and Jointing following equipment		<u> </u>	
No.8	(A) C.I. D.F. sluice valve 140mm dia	3.00	124.40	Each
	(B) 80mm dia C.I. Fire Hydrent (Piller type)	2.00	101.45	Each
	(C) Over flow screwed down type air valve	2.00	126.60	Each
Item	Supply and Fixing of C.I. D-Joints 140mm dia including rubber packings and solvent	14.00	227.65	Each
No.9	cement complete in all respect		l	
Item No.1	Macking connection to main line including digging and refilling the trench complete in all respect	2.00	850.00	Each
	Laying Sewe Line			
Item No.1	Excavation for laying sewersManholes, gully pits, Ichamiers, sumps etc,in ordinary soil (earth sand, loam & clay) including cutting of joints pits, trimming,			
	dressing, leveling, refilling trenches in 20cm layers wateringsand ramming the same including removal of surplus earth or other dismantled material supto a distance of 50 m from the center of trenches.			
(a)	including removal of surplus earth or other dismantled material supto a distance of 50 m from the center of trenches.	370.00	107 16	Cum
(a)	including removal of surplus earth or other dismantled material supto a distance of 50 m from the center of trenches.  (0.0-1.5)M.BGL.	370.00 93.00	107.16 134.98	Cum
(a) (b) Item No.2	including removal of surplus earth or other dismantled material supto a distance of 50 m from the center of trenches.	370.00 93.00 202.00	107.16 134.98 135.00	Cum Cum SQM
(b)	including removal of surplus earth or other dismantled materialsupto a distance of 50 m from the center of trenches.  (0.0-1.5)M.BGL.  1.50m-3.00m B.G.L.  P/F of open Timbering including supply of all material as Planks, Ballies,	93.00	134.98	Cum
(b) Item No.2	including removal of surplus earth or other dismantled materialsupto a distance of 50 m from the center of trenches.  (0.0-1.5)M.BGL.  1.50m-3.00m B.G.L.  P/F of open Timbering including supply of all material as Planks, Ballies, walars,labour, T&P complete in all respect  Concrete with 4 cm. guage brick ballast,fine sand of 1.25 F.M. & cementin	93.00	134.98 135.00	Cum SQM
(b) Item No.2 Item No.3	including removal of surplus earth or other dismantled materialsupto a distance of 50 m from the center of trenches.  (0.0-1.5)M.BGL.  1.50m-3.00m B.G.L.  P/F of open Timbering including supply of all material as Planks, Ballies, walars,labour, T&P complete in all respect  Concrete with 4 cm. guage brick ballast,fine sand of 1.25 F.M. & cementin proportion of 12:6:1 in foundations .[SI. No.273]  Carting and laying of R.C.C. hume pipeNP-2 class& specials from store to the working site of work, lowering the same into trenches, trueto allignment, caulking the joints with rubber ring, & jointing with 1:2 cement mortar in coarse sand including excavation of earth below invert level of pipe, cost of all jointing materials, testing etc.complete.	93.00	134.98 135.00	Cum SQM
(b) Item No.2 Item No.3	including removal of surplus earth or other dismantled materialsupto a distance of 50 m from the center of trenches.  (0.0-1.5)M.BGL.  1.50m-3.00m B.G.L.  P/F of open Timbering including supply of all material as Planks, Ballies, walars,labour, T&P complete in all respect  Concrete with 4 cm. guage brick ballast,fine sand of 1.25 F.M. & cementin proportion of 12:6:1 in foundations .[SI. No.273]  Carting and laying of R.C.C. hume pipeNP-2 class& specials from store to the working site of work, lowering the same into trenches, trueto allignment, caulking the joints with rubber ring, & jointing with 1:2 cement mortar in coarse sand including excavation of earth below invert level of pipe, cost of all jointing materials,	93.00	134.98 135.00	Cum SQM

Item No.5	Construction of Man Hole of (1.00x1.20x3.00) m. internal size including Base concrete of M-20 mix 1:2:4 of 15cm. thick .&P.C.C1:5:10 base conc.thickness20cm.withB.B.brick work in 1:3 cement & coarse sand mortar as per drawing, R.C.C. slab of(1.21x1.21x0.15)m. size of M-20 mix. Including R/F.upto 0.26 qtls. In each M.H. and also including foot steps of PVC sheethed cast iron 1 Nos. , plastering the walls with 12 cm. thick dedo plaster in 1:3 cement & coarse sand mortar and fixing charges of M.H. cover, excluding cost of cover . complete in all respect as per dir. Of E/I/C.	14.00	34346.0 0	Each
Item No.6	Construction of Manhole regulating shaft (1.00x1.20) m. size including E/W in excavation, brick work in 1:3 cement & coarse sand mortar, & 3Nos. PVC sheethed cast iron foot steps in per meter length., plastering the wall surface with 12 mm.thick dedo plaster in 1:3 cement & coarse sand mortar complete in all respect as per direction of E/I/C.	-13.20	6755.00	Rmt
Item No.7	Construction of Sewer connection chamber of (0.60x0.60x3.00) m. internal size including Base concrete of M-20 mix 1:2:4 of 15cm. thick .&P.C.C1:5:10 base conc.thickness20cm.withB.B.brick work in 1:3 cement & coarse sand mortar as per drawing, R.C.C. slab of(1.21x1.21x0.15)m. size of M-20 mix. Including R/F.upto 0.26 qtls. In each M.H. and also including foot steps of PVC sheethed cast iron 1 Nos. , plastering the walls with 12 cm. thick dedo plaster in 1:3 cement & coarse sand mortar and fixing charges of M.H. cover, excluding cost of cover . complete in all respect as per dir. Of E/I/C.	6.00	13883.0 0	Each
Item No.8	Construction of Sewer connection chamber regulating shaft (0.60x0.60) m. size including E/W in excavation, brick work in 1:3 cement & coarse sand mortar, & 3Nos. PVC sheethed cast iron foot steps in per meter length., plastering the wall surface with 12 mm.thick dedo plaster in 1:3 cement & coarse sand mortar complete in all respect as per direction of E/I/C.	-10.50	4041.00	Rmt
Item No.9	Supply of different dia RCC Hume pipes NP-2 class socket and spigot typeof standard make as per direction of E/I/C			
	(a) 250mm dia NP-2(S&S)	360.00	282.00	Rmt
	Const. Of Boundry Wall			
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Item No.1	Excavation in foundation in ordinary Soil(Loam,clay or sand)including lift upto 1.50M. & including filling watering &ramming of excavated earth into the trenches or into the space between the building & the sides of the foundation trenches or into the plinth & removal & disposal of surplus earth as directed by the Engineer-in charge upto a distance of 30M. from the foundation trenches.[SI No.251(a)]	146.00	63.00	Cum
Item No.2	Concrete with 4 cm. guage brick ballast, fine sand of 1.25 F.M. & cement in proportion of 12:6:1 in foundations .[SI. No.273]	25.00	2300.00	Cum
Item No.3	M-150 Brick Work in one cement & six fine sand of 1.25 F.M morter in foundation & plinth includind supply of all materials,Labour,T&P etc.required for proper completion of the work.[SI.No.303]	85.00	3700.00	Cum
Item No.4	2.5 cm. Thick D.P.C with cement & approved course sand 1:2 with & including water proofing as ordered by the Engineer incharge in the proportion as specified by the manifauctured i/c supply of all materials,tools & plants etc. required for the completion of the work & including proper curing & shutterings as necessary.[SI.No.361]	42.00	275.00	Sqm
Item No.5	Applying a coat of residual petroleum bitumen of penetration 85/50 or 85/25 of approved quality using 1.7 kg per sqm on damp proof coarse after cleaning the surface with brushes and finally eith a piece of cloth lightly soaked in kerosene oil. [SI.No.362+363]	42.00	135.00	Sqm
Item No.6	First class Brick Work in 1:4 cement & fine sand of 1.25 F.M mortar for one brick thick wall in super structer [SI.No.303+309+310]	75.00	4030.00	Cum
Item No.7	Mild steel or Iron work in small size such as door chaukhats etc. (S.I.No.502)	2.00	6000.00	Qtl
Item No.8	12mm thick plaster with cement and fine sand of 1.25 F.M. mortor in 1:4 over brick work internal side. [SI.No.584]	760.00	115.00	Sqm