# ONLINE TENDER FOR CONSTRUCTION OF ROAD(EAST SIDE) AT MANALI, CHENNAI

TENDER NO: GLC/TE17/21 DATED 2/9/17 DUE DATE & TIME: 15.9.17 BY 18.00 HOURS

(UN-PRICED PART)



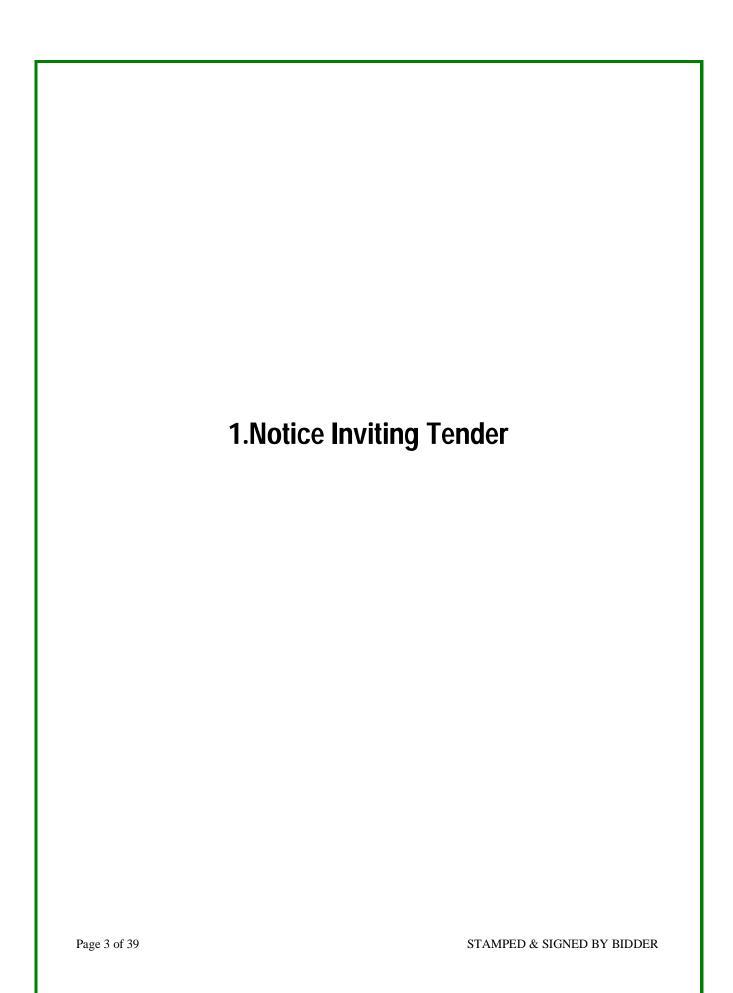
Balmer Lawrie & Co. Ltd.

(A Government of India Enterprise) SBU: Greases & Lubricants

32, Sattangadu Village, Manali, Chennai-400068

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#### **TENDER NOTICE NO. GLC/TE17/21**

TENDER DUE DATE & TIME: 15/9/17 AT 18.00 Hrs

M/s. Balmer Lawrie & Co Ltd.(BL) having its Grease manufacturing and Lube oil blending facilities at 32, Sattangadu Village, Manali, Chennai – 400 068. BL invite sealed tenders from competent and experienced suppliers for following job:-

#### **SCOPE OF WORK**

Given as ANNEXURE-

#### **COMPLETION PERIOD**

Time is the essence of the order. The total project shall be completed within 45 DAYS from the date of placement of order / LOI.

#### **WORK COMMENCEMENT:**

On site work should start with in 7 days of release of LOI/PO.

#### **TENDER DOCUMENTS**

Tender Documents comprise of two parts viz. Part-I (Un-priced Bid) and Part-II (Price Bid). The Un-priced Part consists of Invitation to Tender, Special Conditions of Order/ contract, General Condition of Order/ contract, Technical Specifications, Drawings, Data sheets and Annexes. The priced part consists of Tender Schedule/ Schedule of Work.

#### TENDER SUBMISSION

#### **Procedure for Online Bid Submission**

The bidder shall submit his response through bid submission to the tender on e\_Procurement platform at https://balmerlawrie.govtprocurement.com by following the procedure given below. The bidder would be required to register on the e-procurement market place https://balmerlawrie.govtprocurement.com in and submit their bids on line. No off line bids shall be entertained by the Tender Inviting Authority. The bidders shall submit their eligibility and qualification documents, Technical bid, Financial bid etc., in the standard formats prescribed in the Tender documents, displayed in e Procurement web site. The bidders shall upload the scanned copies of all the relevant certificates, documents etc., in support of their eligibility criteria/technical bids in the e Procurement web site. However, bulky documents need not be scanned and uploaded but physical copy of the same should be sent to the Tender Inviting Authority office before the tender opening date. The bidder shall sign on the statements, documents, certificates, uploaded by him, owning responsibility for their correctness/authenticity.

#### Registration with e Procurement platform:

For registration and on line bid submission bidders may contact HELP DESK of M/s C1 India Pvt., Ltd., or they can register themselves on line by logging in to the website <a href="https://balmerlawrie.govtprocurement.com">https://balmerlawrie.govtprocurement.com</a>

#### **Digital Certificate authentication:**

The bidder shall authenticate the bid with his Digital Certificate for submitting the bid electronically on e Procurement platform and the bids not authenticated by digital certificate of the bidder will not be accepted on the e Procurement platform.

All the bidders who do not have Digital Certificates need to obtain Digital Certificate. They may contact Help Desk of C1 India Pvt. Ltd.

#### **Submission of Hard copies:**

After submission of bid on line, the bidders are requested to submit the demand drafts /Bank Guarantee towards tender fees and / EMD along with other documents as required, to the Tender Inviting Authority before opening of Techno-commercial /Unpriced bid. Under no circumstances Hard copy of Price Bid should be sent The bidder shall furnish the original DD / Bank Guarantee and other documents either in person or through courier or by post and the receipt of the same within the stipulated time shall be the responsibility of bidder. BL shall not take any responsibility for any delay or non-receipt of said documents. If any of the documents furnished by the bidder is found to be false / fabricated, the bidder is liable for black listing, forfeiture of the EMD, cancellation of work and criminal prosecution. The bidder is requested to get a confirmed acknowledgment from the Tender Inviting Authority as proof of submission of hard copies.

#### **Corrigendum to tender:**

The bidder has to keep track of any changes by viewing the addendum / Corrigendum's issued by the Tender Inviting Authority on time-to- time basis in the E-Procurement platform. The Company calling for tenders shall not be responsible for any claims/problems arising out of this.

#### **Bid Submission Acknowledgment:**

The user should complete all the processes and steps required for bid submission. The successful bid submission can be ascertained once acknowledgment is given by the system through bid submission number after completing all the processes and steps. Tender Inviting Authority and C1 India Pvt. Ltd. will not be responsible for incomplete bid submission by users. Users may also note that the incomplete bids will not be saved by the system and are not available for the Tender Inviting Authority for processing.

Before uploading scanned documents, the bidders shall sign on all the statements, documents, certificates uploaded by him, owning responsibility for their correctness / authenticity.

#### **Disclaimer Clause:**

The Company (Balmer Lawrie & Co. Ltd.) nor the service provider (C1 India Pvt. Ltd.) is responsible for any failure of submission of bids due to failure of Internet or other connectivity problems or reasons thereof.

#### **SUPPLY OF MATERIAL**

All materials required for the contract shall be supplied by the contractor.

#### **TAXES & DUTIES**

Rates shall be exclusive of GST. Applicable GST will be paid extra.

#### I.T. RETURN CERTIFICATE, S.T. REGISTRATION

Bidders are requested to submit Income Tax Return Certificate, Sales Tax Registration along with Part - I of their offer, failing which their offer may be liable to be rejected.

#### **VALIDITY OF OFFER**

Bidders shall keep their offer valid for a period three (2) months from the due date or extended due date, if any, of the tender.

#### NON-CONFORMANCE

Tenders not conforming to the above mentioned requirement are liable to be rejected.

#### **SECURITY DEPOSIT**

The Tenderer, with whom the order/ contract is decided to be entered into and intimation is so given will have to make a security deposit 5% of the total order/ contract value in the form of Account payee crossed Demand Draft drawn in favor of Balmer Lawrie & Co. Ltd. Payable at CHENNAI within seven (7) days from the date of intimation of acceptance of their tender, failing which the Balmer Lawrie & Co. Ltd. Reserves the right to cancel the Order/ contract. Security Deposit shall be released after submission of the Performance Bank Guarantee.

#### TERMS OF PAYMENT(Separate Running Account bill will be paid for a minimum value of Rs.5 lakhs)

50% payment after receipt of Quality approved material by BL at site in good condition & submission of Invoices / Bills accompanied by the relevant documents.

40% after Completion of Area wise Civil work and Certification by Our Consultant / Officer In charge

Balance 10% after testing & commissioning and submission of Bank Guarantee of equal amount towards Performance Guarantee of twelve (12) months from the date of commissioning or eighteen (18) months from the date of site delivery, whichever is earlier.

#### **RIGHT OF ACCEPTANCE / REJECTION**

Mere issue of tender document and submission of bids does not necessarily qualify for consideration of bids. M/s Balmer Lawrie & Co. Ltd. reserve the right to accept or reject any or the lowest tender either in part or in full without assigning any reason whatsoever.

For clarifications required, if any, please contact Mr. Narayanan.sks (Plant Head), Cell No. 9445566243

Please acknowledge receipt and confirm your participation in this tender.

Thanking you,

Yours faithfully, for BALMER LAWRIE & CO. LTD.

Page  $6^{\perp}$  of  $39^{\perp}$ 

STAMPED & SIGNED BY BIDDER

P.C.S.SRINIVAS CM(SCM) **2.DEFINITIONS** Page 7 of 39 STAMPED & SIGNED BY BIDDER

#### 1.0 Definitions:

The following expressions hereunder and elsewhere in the order/ contract documents used shall have the following meanings hereunder respectively assigned to them except where the context otherwise requires:

- 1.1 The 'Owner' /'Company' / 'Purchaser' shall mean M/s. Balmer Lawrie & Co. Ltd. (BL) a company incorporated in India and having its registered office at 21, Netaji Subhas Road, Kolkata 700 001 and shall include its successors and assigns.
- 1.2 Tenderer s' or 'Bidders' shall mean such parties who have been issued Tender Document by the Prime Order/ supplier and those parties who have submitted these offers to the Prime Order/ supplier in response to the Tender Document issued to them.
- 1.3 Tender Document' shall mean the Tender Documents comprising Part I (Un-priced Bid), Invitation to Tenders, General Conditions of Tender, Special Conditions of Tender, Schedule of Quantities, Specifications / Data Sheets, Addenda / Corrigenda to the tender document issued by the Owner, From of Tender etc. and Part-II ( Priced Bid)- Price Schedule.
- 1.4 The 'Supplier' / 'Vendor' / Successful Tenderer/ Contractor' shall mean the Tenderer selected by Owner for the performance of the work.
- 1.5 The 'Sub-Vendor' shall mean any person or firm or company (other than the Prime vendor/ supplier) to whom any part of work has been entrusted by the Vendor/ supplier with the written consent of the Engineer-in-charge and the legal representatives, successors and permitted assigns of such persons, firm or company.
- 1.6 The 'Project' shall means Grease Processing & Lube Oil Blending Plant, Chennai.
- 1.7 The 'Project Manager' shall mean the Officer nominated by Owner to co-ordinate and supervise all the activities connected with implementation of project on their behalf. 'Project Manager' may his discretion depute his representative to coordinate / supervise the work of vendor/ Sub-vendor / Sub- contractor at site/fabrication shop.

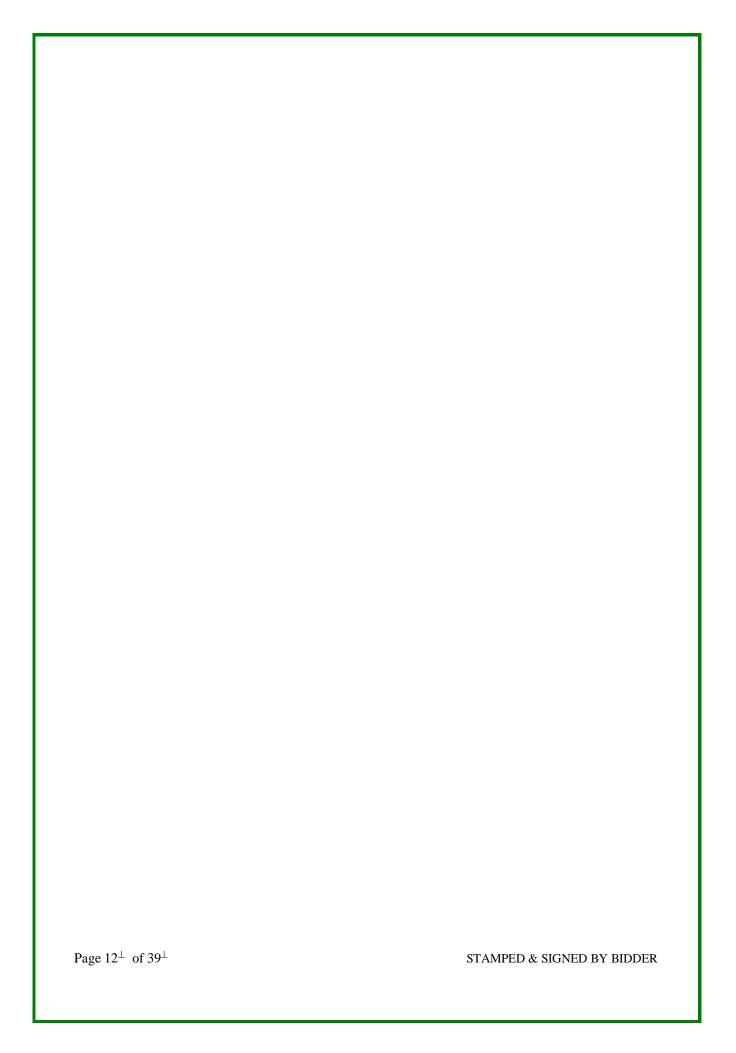
- 1.8 The 'Engineer-in-charge' shall mean the Engineer / authorized representative of Owner or the purpose of the Order/ contract for overall supervision and co-ordination of project activity and certification of billing.
- 1.9 'Site' shall mean all such land, waters and other places on, under, in or through which the works for the project are to be performed under the order/ contract.
- 1.10 'Site Engineer' shall mean the Engineer (s) for the time being deputed by the Engineer-in-charge as Site Engineer for the work to be performed by the vendor/supplier at sites and co-ordinate all activities of all parties at site.
- 1.11 'Inspection Authority' means B L's inspector/ Third Party Inspection Agency (TPIA) as specified by the Owner.
- 1.12 The 'Work' and 'Scope of Work' shall mean the totality of the work by expression or implication envisaged in the order/ contract and shall include all material, equipment and labor required for relative or incidental to or in connection with the commencement, performance or completion of any work and / or for incorporation in the work.
- 1.13 The 'Works' shall mean the product (s) of the work and shall include all extras, addition, alterations or substitution as required for the purpose of the order/ contract.
- 1.14 The 'Works Order/ contract' shall mean the totality of the agreements between the parties as derived from the Order/ contract Documents for the entire work.
- 1.15 The 'Order/ contract Document' shall mean collectively Tender Document as laid out in this Standard Order/ contract Format which is based on the General & Special Conditions of Tender, technical documents/ Specification(s), price schedule, schedule of work including agreed upon variations before order/ contract placement stage.
- The 'Specification(s)' shall mean the various specifications as set out in these specifications forming part of the tender documents and as referred to derived from the order/ contract and any order (s) or instruction (s) there under and the absence of any specifications as aforesaid covering any particular work or part of portion thereof shall mean the relevant Indian Standard Institution Specifications for or relative to the particular work or part thereof and in the absence of any Indian Standard Specifications covering the relative work or part or portion thereof, shall mean the standards or specifications of any other country applied in India as a matter of standard engineering practice and approved in writing by the Engineer-in-charge or Site Engineer with or without modifications.
- 1.17 'Order' and 'Instruction' shall respectively mean any written order or instruction given by the Engineer-in-charge or Site Engineer within the scope of their respective powers in terms of the order/ contract and shall include alteration/variation order to effect additions to or deletion from and / or alteration in the work detailed in the order/ contract.
- 1.18 'Plans' and 'Drawings' shall mean and include all technical documentation such as maps, plans, drawings, sketches, tracings and prints forming part of the tender documents and any details or working drawings, amendments and / or modifications thereof approved in writing by the Engineer-in-charge, Site Engineer or any agency

notified by the Engineer-in-charge to the Sub-order/ supplier for the purpose and shall include any other drawings or plans in connection with the work as may from time to time be furnished by or approved in writing by the Engineer-in-charge or Site Engineer or any other agency nominated by the Engineer-in-charge on his behalf in connection with the work.

- 1.19 'Temporary Work' / 'Enabling Work' shall mean all such works which are required in/or about the execution, completion or maintenance of the work and if not provided for specifically in the Schedule of rates shall be deemed to be done by the vendor/ supplier at his own cost in fulfillment of the order/contract.
- 1.20 'Constructional Plant' shall mean all such Plant & Machinery, appliances, aids or things of whatsoever nature other than materials intended to form part of the permanent works which are required in or about the execution, completion for maintenance of temporary and permanent work.
- 1.21 'Completion Certificate' shall mean the certificate to be issued by the Engineer-in-charge after the work have been completed to his satisfaction.
- 1.22 'The Final Certificate' in relation to the work shall mean the certificate to be issued after the period of liability is over regarding satisfactory compliance of various provisions of the order/ contract by the vendor/ supplier.
- 1.23 'Period of Liability' or 'Defect Liability Period' refers to the specified period from the date of completion of the entire work as indicated in the completion certificate up to the date of issue of Final Certificate during which the vendor/supplier is responsible for rectifying all defects 'free of cost' to the satisfaction of Prime Order/ supplier.
- 1.24 'Schedule of Rate' / 'Schedule of Quantities' / 'Tender Schedule' shall mean the schedule of rates incorporated in the order/ contract and shall also include supply rates for labor, materials etc. as well as payments for all such work determined in accordance with the order/ contract conditions.
- 1.25 'Running Account Bill' shall mean a Bill for the payment of 'On Account to the Sub-supplier / supplier.
- 1.26 'Agreed Variation' shall mean the statement of Agreed Variation annexed to the Acceptance of Tender or a further Amendment to the Order/ contract forming part thereof.
- 1.27 'Acceptance of Tender' shall mean the Acceptance of Tender issued by the Prime Order/ contractor and acceptance of bid of the Vendor/ supplier against that tender.
- The 'Total Order/ contract Value' shall up to calculation of the entire remuneration due to the Vendor/ supplier in terns of the Order/ contract, on successful completion of the works means the total order/ contract value as specified in the Acceptance of Tender and after calculation of the entire remuneration due to the Vendor/ supplier under the order/ contract, on successful completion of the works shall mean the totally of such remuneration.
- 1.29 'Written Notice' or 'Notice' in writing shall mean all hand written, typed /printed form sent (unless delivered personally) or proved to have been received by registered post to the last known address / private / business or registered office, of the Vendor/ supplier and shall be deemed to have been received in the ordinary course of post it would have been delivered.

- 1.30 'Letter of Intent' shall mean intimation by a letter to the successful Tenderer that the tender has been accepted in accordance with the previous contained therein.
- 1.31 'Progress Schedule' shall mean the time schedule of Progress of Work.
- 1.32 'Alteration Order or Variation Order' means Order given in writing by the Owner to affect additions to or deletions from and alterations in the work.

### **3.General Conditions of Tender**



#### **GENERAL CONDITIONS OF TENDER**

2.0 This is only a Price Inquiry and not an order.

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#### 3.0 SUBMISSION OF TENDER:

- 3.1 Before submitting the tender, the Tenderer shall at their own cost and expenses may visit the site, examine and satisfy as to the nature of the existing roads, means of communications, the character of the soil, state of land, the correct dimensions of the work facilities for completion of the work at site.
- 3.2 The Tenderer shall be deemed to have satisfied fully before tendering as to the correctness and sufficiency of his tender for the supply and of the rates and prices quoted in the Schedule of Quantities which rates and prices shall except as otherwise provided cover all his obligations under the order/contract.
- It must be clearly understood that the whole of the conditions an specifications are intended to be strictly enforced and that no work will be considered as extra work and allowed and paid for unless they are clearly outside the scope, spirit, meaning of the order/ contract and intent of the owner and have been so ordered in writing by Owner and / or Engineer-in-charge / Site-in-charge, whose decision shall be final and binding.
- 3.4 Before filling the Tender, the Tenderer will check and satisfy all drawings and materials to be procured and the schedule of quantities by obtaining clarification from the owner on all the items as may be desired by the Tenderer. No claim for any alleged loss or compensation will be entertained on this account, after submission of tender by the Tenderer / Vendor and such a claim shall not be attributable.
- No escalation in the Tender rates will be permitted throughout the period of order/contract or the period of completion of the job whichever is later on account of any variation in prices of materials or cost of supervision or due to any other reasons. Claims on account of escalation shall not be liable for arbitration.
- 3.6 Owner reserve their right to award the order/ contract to any Tenderer and their decision in this regard shall be final. They also reserve their right to reject any or all tenders received. No disputes could be raised by any Tenderer (s) whose tender has been rejected.
- 3.7 Employees of the State and Central Govt. and employees of the Public Sector Undertakings including retired employees are covered under their respective service conditions / rules in regard to their submitting the tender. All such persons should ensure compliance to the respective / applicable conditions, rules etc. Any person not complying with those rules etc. but submitting the tender in violation of such rules, after being so noticed shall be liable for the forfeiture of the Earnest Money Deposit made with the tender, termination of Order/ contract and sufferance on account of forfeiture of Security Deposit and sufferance of damages arising as a result of termination of order/ contract.

- Any time after acceptance of tender, Owner reserves the right to add, amend or delete any item, the bill of quantities at a later date or reduce the scope of work / supply in the overall interest of the work by prior discussion and intimation to the vendor. The decision of Owner, with reasons recorded therefore, shall be final and binding on both the Owner and the vendor. The vendor shall not have right to claim compensation or damage etc. in that regard. Owner reserves the right to split the supply items under this order/ contract between two or more vendors without assigning any reasons.
- Vendor shall not be entitled to sublet, vendor or assign, the supply and supervision of erection and commissioning under this order/ contract without the prior consent of Owner obtained in writing.
- 3.10 All signatures in tender document shall be dated as well as all the pages of all sections of the tender documents shall be initialed at the lower position and signed, wherever required in the tender papers by the Tenderer or by a person holding Power of Attorney authorizing him to sign on behalf of the Tenderer before submission of tender.
- 3.11 The tender should be quoted in English, both in figures as well as in words. The rates and amounts tendered by the Tenderer in the Schedule of rates for each item and in such way that insertion is not possible. The total tendered amount should also be indicated both in figures and words with the signature of Tenderer.
- 3.12 All corrections and alterations in the entries of tender paper will be signed in full by the Tenderer with date. No erasures or over writings are permissible.
- 3.13 Transfer of tender document by one intending Tenderer to another one is not permissible. The Tenderer on whose name in the tender has been sent only can quote.
- After submission of bid online, the bidders are requested to submit the originals of DD/BG towards EMD, tender fee to the tender inviting authority before opening of price bid and other uploaded documents at the time of concluding agreement. The bidder shall invariably furnish the original DD/BG to the tender inviting authority before opening of price bid either personally or through courier or by post and the receipt of the same within the stipulated time shall be the responsibility of tenderer. The Department shall not take any responsibility for any delay or non-receipt. If any of the documents furnished by the tenderer is found to be false/ fabricated/ bogus, the tenderer is liable for blacklisting, forfeiture of the EMD, cancellation of work and criminal prosecution.
- If the bidder is unable to meet the technical specification, they may quote for the closest available substitute giving details of same for Owner's consideration.

#### 4.0 Validity:

As per NIT. Bidder shall not be entitled during the said period, without the consent of the **Owner** in writing, to revoke or cancel his tender or change the tender offer given or any terms thereof. As mentioned in the Notice Inviting Tender.

In case of Bidder revoking or canceling the tender changing any terms in regard hereof without written consent as stated above, the Owner shall forfeit the Earnest Money deposited by him along with the tender.

The rates quoted by the successful Bidder shall remain valid and firm for the entire period of contract up to the completion of work. No escalation to this effect will be accepted by the **Owner**.

#### 5.0 Testing & Inspection

The material, design and workmanship shall satisfy the relevant Indian & international Standards, the job specifications contained herein and codes referred to. Where the job specifications stipulate requirements in addition to those contained in the standard codes and specifications, these additional requirements shall also be satisfied. In the absence of any standards/specifications / code(s) of practice for any part of the work covered in this tender, the instructions/directions of Engineer-In-Charge will be binding on the **Supplier**.

#### 6.0 Other Conditions:

BL reserves the right to reject offers not meeting its Technical requirements and commercial conditions.

BL reserves the right to accept any tender in whole or in part or reject any of the tenders without assigning any reasons.

BL shall not be bound to accept the issued tender and reserves right to reject any tender in part or in full. Decision of BL in this connection shall be final.

Prices are to be quoted in the format shown in the price part.

#### 7.0 Terms & Conditions:

#### Firm Price:

On placement of order, prices will remain firm till complete execution.

#### 8.0 Delayed Supply/Completion:

Timely-completion is the essence of purchase order. In case of delay in execution of the order beyond order/ contractual delivery date as stipulated in the order by BL at its opinion can

#### i) Either

Accept the delayed completion on price reduced by sum equivalent to 0.5 percent of the total order/contract value per week of delay or part thereof subject to a maximum of 10% of the total order/contract value.

#### ii) Or

Cancel the order in part or full and get the work done from other agencies on account at the risk of the bidder without prejudice to its right under (i) above in respect of works completed. All costs and expenses incurred by BL, if any, resulting from cancellation of order shall be recovered from the bidder.

Bidders are advised to submit quotations strictly based on the terms, conditions and specifications contained in the Tender Document and not stipulate any deviations. However, if it becomes unavoidable, deviations should be stipulated with reference to the clause number, para and page

number of the Tender Document. Owner reserves the right to evaluate offers containing deviations having financial implications after adding cost of such deviations as determined by the Owner.

#### 9.0 Terms of Payment:

As per NIT. Moreover noted percentage payment shall be made on receipt of material at site in good condition against submission of the following documents along with Bill/ Invoice:

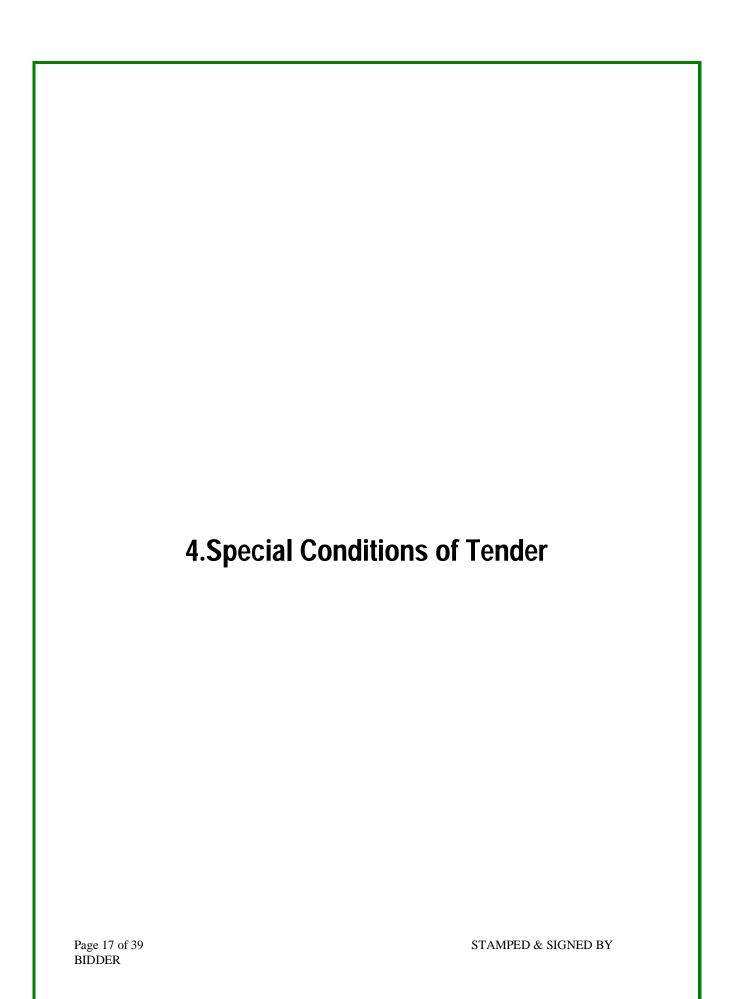
- I) Delivery challan / lorry receipt duly acknowledged by the site-in-charge
- ii) Manufacturer test certificate
- iii) Inspection / Clearance report
- iv) Manufacturer Guarantee certificate

#### 10.0 Performance Guarantee:

- 10.1 Performance Guarantee:
- a) The supplier shall guarantee that the material of construction and workmanship of work done and any fittings designed / manufactured / supplied by him are as specified in the tender schedule and wherever there is nothing specifically mentioned shall correspond to the best available grade and quality as required for the application.
- b) The supplier shall also guarantee that the work done and any fittings designed, manufactured, supplied, erected shall be as per prevailing relevant standard, codes and statutory practices / stipulations.
- The supplier shall guarantee the work done and any fittings designed, manufactured, supplied, erected and tested by him against defective materials, poor workmanship, improper design, operation inadequacies & problems and failure from normal usage, for a period of 12 (twelve) calendar months after final acceptance of the work by the Owner or eighteen (18) months from the date of site delivery, whichever is earlier. Performance Bank Guarantee shall be issued by any Nationalized / Scheduled Bank for 10% of basic value of material supplied and shall remain valid for above guarantee period.

#### 10.2 **Warranty:**

The Supplier will repair and/or replace all defective parts, components / fittings, accessories etc. which shall be notified to him in writing within the Defect Liability Period provided that such defective parts, components, fittings, accessories etc. are promptly rectified and replaced by him free of cost. The supplier will provide similar warranty on the parts, components, fittings, accessories etc. repaired and/or replaced.



#### SPECIAL CONDITIONS OF TENDER

The special terms & condition as stated hereunder shall be read in conjunction with General Conditions of Tender.

#### 1.0 DEPOSITS:

#### 1.1 **SECURITY DEPOSIT**

The Tenderer, with whom the order/ contract is decided to be entered into and intimation is so given will have to make a security deposit 5% of the total order/ contract value in the form of Account payee crossed Demand Draft drawn in favor of Balmer Lawrie & Co. Ltd. Payable at Chennai within seven (7) days from the date of intimation of acceptance of their tender, failing which the Balmer Lawrie & Co. Ltd. Reserves the right to cancel the Order/ contract. Security Deposit shall be released after submission of the Performance Bank Guarantee.

#### 2.0 COMPLETION OF DELIVERY

All the work done shall be executed in strict conformity with the provisions of the order/ contract documents and with such explanatory details, drawings, specifications and instructions as may be furnished from time to time to the supplier by the Engineer-in-charge / Site-in-charge, whether mentioned in the order/ contract or not. The tenderer shall ensure that the quality of the work and workmanship in strict accordance with the specifications and to the entire satisfaction of the Engineer-in-charge / Site-in-charge.

#### 3.0 INSPECTION

- 3.1 The material will be subject to inspection by Owner /authorized representatives as per the relevant codes, standards and specification. Quoted prices shall include Bidder's charges towards inspection.
- 3.2 All costs for carrying out inspection including that required for making arrangements for the same shall be borne by the vendor. The salaries and fees of Inspectors and their traveling, lodging and boarding expenses will not be borne by the vendors unless inspection become in fructose due to any omission or commission on the part of the vendor in which case the same cost shall be borne by the vendor.

#### 4.0 PERFORMANCE GUARANTEE

The vendor shall undertake to be responsible for the performance and quality of flow meter supplied by him.

#### 5.0 DISCREPENCY, HEADINGS / TITLES, SINGULAR AND PLURAL

#### 5.1 **DISCREPENCY IN TENDER DOCUMENT**

Should there be any discrepancy, inconsistency, error or omission in the Tender Documents, the Tenderer shall bring it to the notice of the Owner / Engineer-in-charge for necessary clarification / action. In the event of such matters those are referred to later for decision of the Owner / Engineer-in-

charge directing the manner in which the work is to be carried out shall be final & conclusive and the vendor shall carry out work in accordance with this decision.

#### 5.2 **HEADINGS / TITLES**

All headings & Titles / Notices to the clauses, specifications / drawings are solely for the purpose of indicative reference and not as summary of the contents and thus shall not be deemed to be part of the clauses of the order/ contract.

#### 5.3 **SINGULAR AND PLURAL**

Unless otherwise stated or repugnant to the context the singular shall include plural and vice-versa.

#### 6.0 REVISION / CHANGES / QUANTITY VARIATION

- Owner may make in writing any revisions or changes in the work order, including additions or deletions from the quantities ordered in the specifications or drawings. The vendor shall carry out such revision / changes and be bound by the same terms and conditions to the extent applicable, though the said revisions/ changes were not incorporated in the initial order.
- Owner reserves the right to increase or decrease the tendered quantity to any extent or replace specification, drawing, design of any or every item or delete them out at any stage of the work. The vendor's claim for compensation or damages on account of this shall not be entertained. Such deviation shall be adjusted at the rates contained in the order/ contract or by issuing variation order (s) at the prevailing market rates, if the rates are not available in the order/ contract.

#### 7.0 FORCE MAJEURE

- Any delay in or failure of the performance of either part hereto shall not constitute default hereunder or give rise to any claims for damage, if any, to thereafter extent such delays failure of performance is caused by occurrences such as Acts of God or an enemy, expropriation or confiscation of facilities by Government authorities, acts of war, rebellion, sabotage or fires, floods, explosions, riots or strikes. The vendor shall keep records of the circumstances referred to above and bring these to the notice of the Engineer-in-charge / Site -in-charge in writing immediately on such occurrences. The amount of time, if any, lost of any of these counts shall not be counted for order/ contract period. On decision of the Owner arrived at after consultation with the vendor, shall be final and binding. Such a determined period of time be extended by the Owner to enable the vendor to deliver the items within such extended period of time.
- 7.2 If vendor is prevented or delayed from the performing any its obligations under this Agreement by Force Majeure, then vendor shall notify Owner the circumstances constituting the Force Majeure and the obligations performance of which is thereby delayed or prevented within seven days of the occurrence of the event.

#### 8.0 ARBITRATION

8.1 Any dispute or difference arising under this Contract shall be under jurisdiction of CHENNAI to a sole arbitrator to be appointed by the Chairman & Managing Director, Balmer Lawrie & Co. Ltd. and the provisions of Arbitration Act, 1996 including any statutory modifications or enactment thereof shall

apply to the Arbitration proceedings. The fees of the arbitrator, if any, shall be paid equally by both the parties.

- 8.2 The vendor shall not be entitled to raise any objection to the appointment of such officer of BL as the sole arbitrator on the ground that the said officer is an officer of BL or that he/she has to deal or dealt with the matter to which the order/ contract relates or in the course of duties as an officer of BL he / she has / had expressed views on all or any of the matters in dispute or difference.
- In the event of the arbitrator to whom the matter is originally referred to, is transferred or vacates office, the Functional Director, aforesaid, shall nominate another officer of BL to act as arbitrator.
- 8.4 Such officer nominated as sole Arbitrator shall be entitled to proceed with the arbitration from the stage at which it was left by the predecessor. It is the term of this order/ contract that no person other than the Functional Director or a person nominated by Functional Director of BL shall act as Arbitrator.
- The award of the arbitrator shall be final, conclusive and binding on all the parties to the agreement subject to the provisions of the Arbitration Act, 1940 and the rules made there under for the time being ion force.
- The award shall be made in writing and published by the Arbitrator within six months of entering upon the reference or within such further time mutually extended by the parties. The arbitrator shall have power to order and direct the parties to abide by, observe and perform all such directions as the arbitrator may think fit and proper to issue having regard to the fact that the arbitration proceedings have to be completed within the specified period solely on the principles of Natural Justice.
- The arbitrator shall be at liberty to appoint, if found necessary any accountant or engineering or other person to assist him / her to act by the opinion so taken.
- The arbitrator shall have power to make one or more awards whether interim or otherwise in respect of the dispute and difference and in particular shall make separate awards in respect of each claim or cross claims of the parties.
- 8.9 The arbitrator shall be entitled to direct any parties to pay the costs of arbitration in such manner and to such extent as a arbitrator may in his discretion determine and shall also be entitled to require one or both the parties to deposit funds in such proportions to meet the arbitration expenses. The parties to arbitration whenever called upon to do so shall be bound to comply with such direction without any demur.

# 9. CONTRACTOR'S GENERAL OBLIGATIONS REGARDING WORKMEN [WHEREVER ANY PERSON OF ANY CONTRACTOR IS REQUIRED TO BE WORKING IN THE FACTORY / OFFICE PREMISES]

Workmen will be engaged by the Contractor based on the work to be carried out from time to time. The General Obligations of the Contractor in this respect are given hereunder:

However, the following details/statement of obligations are not exhaustive.

- 1) The contractor will ensure that all legal requirements in relation to Contractor Labour[R&A] Act 1970, Workmen Compensation Act, ESI Act, Provident Fund & Miscellaneous Provisions Act and other laws as applicable to the Company from time to time are complied with by the Contractor.
- 2) The contractor will ensure and carryout his job safely. The Contractor will be liable to Company for any damage to the properties of the Company by the Contractor or his agent/employees while carrying out the job as detailed above and make good the same to the Company through payment as may be assessed by the Company.
- 3) Workmen employed by the Contractor will be directly supervised and controlled by the Contractor.
- 4) The Company will not be responsible for any liabilities towards the workmen employed by the Contractor.
- 5) The Contractor will ensure that his employees wear the Safety appliances provided by the Contractor and that adequate safety precautions are taken by them while carrying out their work in the factory premises.
- 6) The Contractor will make his own arrangements for their transport, food and accommodation and any other facility if required.
- 7) The Contractor will provide the company a list of workmen who are required to carryout the work within the factory premises against which the Company will be providing them with gate passes. The Contractors workmen will have to furnish the same at the Security check for entry into the premises. The Contractor will ensure that workers other than the names registered by them with the company / authorities are not employed.
- 8) The Contractor will be responsible for discipline and behaviour of their workers. The Contractor will also ensure that a responsible Supervisor is always present at the work site who will report to the Company on daily basis.
- 9) The Company will have privity of Contract with the Contractor only and will give instructions to the Contractor or his authorized Manager/ Supervisor and will have nothing to do or concerned with the conditions of employment of workmen or any other person working for the Contractor.
- 10) The Contractor shall pay his workers their wages and other dues etc., regularly and punctually and within the time limit s stipulated in the Contract Labour [R&A] Act, Minimum Wages Act and Payment of Wages Act.
- 11) The Contractor shall meet all statutory payments like ESI, PF etc.
- 12) If the Contractor's workmen, representatives, agents etc do not perform work to the company's satisfaction, the Company reserves the right to recover the amount at its sole discretion and /or require such person to be removed from the premises forthwith.
- 13) The Contractor will be liable to indemnify/ reimburse the Company all the money paid in addition to the expenses incurred by the Company, if any such claim is made against the Company by virtue of any statute or any provision of law and rules due to any dispute raised by his workmen.

Read and understood the above conditions and shall abide by the same.

Name of Contractor:	Signature
Date:	
	-oOo-

## **Check List**

SI No	Particulars	Bidder's Response
1	Covering Letter with Tender	Yes/No
2	Tender Document Cost	NA
3	Validity of Offer – TWO (2) months from date of opening of Un-priced bid of the Tender	Confirmed
4	Earnest Money Deposit (EMD)	15000/-

5.Price Schedule-	
for	
(PRICED PART)	
AS PER ENCLOSED ZIP FILE CONSISTING OF DRAWINGS & PRICE SCH	EDULE
Page 23 of 39 BIDDER	STAMPED & SIGNED BY

#### **6. PARTICULAR SPECIFICATIONS**

#### 1.0 **GENERAL**

- 1.1 Work under this contract shall be carried out in accordance with Schedule 'A's, Special Conditions, Particular Specifications, drawings including notes thereon (unless specified otherwise)
- 1.2 General Rules, Specifications, Special Conditions, method of measurements, preambles shall be deemed to be applicable to the work under this documents.
- 1.3 Particular specifications in this section given hereinafter shall be considered as applicable to the works covered under Schedule A and any additional works being executed based on the requirement at site. The particular specifications not relevant to any of the works shall be ignored.
- 1.4 Reference to any drawings which is mentioned on the drawing forming part of the tender but not specifically mentioned in the list of drawings shall be deemed to be forming part of the tender.

#### 2.0 LAYOUT

2.1 In laying out buildings center line dimensions mentioned in the drawings or deduced there from shall be strictly followed.

#### 3.0 MATERIALS

- 3.1 All materials to be supplied by the contractor for incorporation in work shall conform to relevant specifications.
- 3.2 In case specification of materials needed for incorporation is not contained any where in the contract documents, the specification of such materials proposed to be incorporated in work shall be approved from Project In charge, M/s Balmer Lawrie & Co Ltd and PMC before incorporation in the work. Contractor is advised to check availability lead time of procurement from these suppliers before quoting.
- 3.3 As far as practicable all manufactured articles other than those manufactured in contractor's workshop at site shall bear ISI certification mark and which are readily available in the market and are given in Special Condition. It is mandatory for the contractor that ISI certified marked items/articles as listed therein shall only be incorporated in the work.
- 3.4 Local materials such as stone aggregate, sand, lime etc shall generally conform to the sample kept with Manager, M/s Balmer Lawrie & Co Ltd. office in addition to their conformity with relevant specifications given in the tender documents. The samples of such materials shall be got approved from Manager, M/s Balmer Lawrie & Co Ltd. before the materials are brought at site in bulk. The contractor shall submit samples of materials to Project In charge, M/s Balmer Lawrie & Co Ltd. for approval.
- 3.5 Letters conveying approval of samples/materials by Project In charge, M/s Balmer Lawrie & Co Ltd will mention source of supply/name of manufacturer, trade name/brand (if applicable) and reference to clause of the tender documents containing specification of particular materials.
- 3.6 The contractor and executives will ensure that the materials incorporated in the work are identical with the approved samples.

#### 4.0 **EXCAVATION AND EARTHWORK**:

#### 4.1 SURFACE DRESSING:

4.1.1 Surface dressing shall be carried out to a depth n exc 15 cm in soft / loose soil to the extent required for the area covered by the buildings in order to remove vegetation and/or small in equalities outer and around the building to a width of three meters beyond the outer edge of plinth walls / plinth protection. The site shall be dressed to slope away from the structure. All spoils obtained from surface dressing shall be disposed off to a distance n.exc. 50m as directed by Project In charge, M/s Balmer Lawrie & Co Ltd and PMC.4.1.3 Surface dressing shall be carried out before the excavation for flooring is started.

#### 4.2 FILLING

4.2.1 Soil obtained from excavation (except earth / spoil obtained from surface dressing) may be used for filling, if approved by Project In-charge, M/s Balmer Lawrie & Co Ltd and PMC. Approved soil obtained from excavation (other than BC soil shall first be utilized in returning, filling in as well as in filling under floors and shall be well rammed watered and consolidated in layers. For the purpose of deviation 25 % of the soil obtained from excavation will be considered suitable for filling. For balance quantity required, moorum shall be brought from outside land with and including any lead as required. Cost of moorum/quarry dust & any lead required to bring the moorum from outside land shall be deemed to be included in unit rate of respective items & shall not be paid extra. The use of vegetable soil, turf, mud, peat etc, in filling shall not be permitted.

#### 4.3 REMOVAL OF SPOIL

4.3.1 Spoil obtained from surface dressing, and surplus soil, if any, obtained from excavation, remaining after filling in foundation trenches / filling under floors or the entire excavated soil, if not approved for use, shall be removed and disposed off to a distance exc. 250 m but not exc. 500 m and deposited where directed at place and in the manner as directed by the Project in-charge, M/s Balmer Lawrie & Co Ltd and PMC. Rubbish shall be cleared away from site from time to time as directed by Project In-charge, M/s Balmer Lawrie & Co Ltd and PMC. Nothing extra shall be paid on Page 26<sup>⊥</sup> of 39<sup>⊥</sup>

account of any extra lead if any required due to in adequate space for keeping excavated soil at side of trenches.

4.3.2 Top layer of black cotton soil 100 cm below built up area to the extent of plinth protection shall be excavated and removed to a distance not exc. 50 m and deposited where directed and the area thus excavated shall be refilled with approved moorum brought from outside MD land. Any lead required for brining moorum from outside MD land shall be deemed to be included in unit rate of respective items and shall not be paid extra.

#### 5.0 CONCRETE

#### 5.1 MATERIALS

5.1.1 <u>CEMENT</u>: Cement shall be OPC/PPC of reputed brand as approved by project in-charge and shall be procured by contractor at his own cost.

#### 5.1.2 COURSE AND FINE AGGREGATE:

- a) Coarse aggregate for all cement concrete works shall be broken/crushed trap stone conforming to IS specifications.
- b) Fine aggregate for all concrete works shall be naturally occurring river sand conforming to conforming to IS specifications. Sand conforming to grading zone IV of IS-383 shall not be used for RCC work.
- c) M-Sand can also be used in lieu of river sand for brick work and concreting with prior approval.

#### 5.2 <u>CEMENT CONCRETE MIX</u>

5.2.1 Concrete 1:2:4 mix shall be used for Footing, Plinth beams and pedestal etc, with maximum water cement ratio as 0.45.

#### 5.3 MIXING

5.3.1 All concrete shall be mixed in mechanical concrete mixer. Where only small quantity of cement concrete is involved, hand mixing may be adopted if approved by

the Engineer-in-Charge. The contractor should arrange to wash out and clean the mixing drum on completion of work and or on stoppage of work if stoppage is for more than 20 minutes.

5.3.2 All concrete shall be mixed in mechanical mixer.

5.4 <u>CURING</u>: Concreted surface shall be cured continuously moist for 7 days.

#### **6 STEEL REINFORCEMENT**

#### 6.1 MILD STEEL BARS

Mild steel reinforcement bars shall conform to I.S. 226 of latest edition "Standard Quantity" or I.S. 432 of latest edition "Grade I". Other qualities of steel shall not be acceptable.

#### **6.2 HIGH STRENGTH DEFORMED BARS**

Where high strength deformed steel bars and wires are specified, the material shall be as manufactured by M/s. SAIL, M/s. Tata Iron & Steel Company Ltd or M/s. RINL conforming to IS 1786 of latest edition accompanied by a certificate from manufacturer.

Test: Necessary tests on steel reinforcements bars & wires shall be carried out by the contractor as per instruction of Owner/Consultants at an interval mentioned in this contract at no extra cost.

#### **6.3 CLEANING OF REINFORCEMENT**

Before steel reinforcement is placed in position, the surface of the reinforcement shall be cleaned of rust, dust, grease and any other objectionable substances.

#### 6.4 BAR BENDING SCHEDULE OF REINFORCEMENT

On receipt of structural drawing, Contractor shall prepare bar bending schedule of reinforcement and shall obtain approval of the Owner/Consultants.

#### 6.5 CUTTING OF REINFORCEMENT

Before steel reinforcement bars are cut, the contractor shall study the lengths of bars required as per drawing and shall carry out cutting only to suit the sizes required as per drawing.

#### 6.6 PLACING AND SECURITY

Reinforcement bars shall be accurately placed and secured in position and firmly supported or wedged by precast concrete blocks of suitable thickness at sufficiently close intervals so that they will not sag between the supports or get displaced during the placing of concrete or any other operation of the work. Contractor shall maintain reinforcement in its correct position without displacement and correct specified cover. The contractor shall be responsible for all costs for rectification required in case the bars are displaced out of their correct position.

#### 6.7 BINDING WIRE

The reinforcement shall be securely bound wherever bars cross or whenever required for with 20 gauge stainless steel wire.

#### 6.8 WELDING

Welding of bars shall not be carried out unless specifically authorized in writing by Owner/Consultants as per IS Code of Practice in place of splicing. However, no extra payment shall be allowed for the same.

#### 6.9 BENDS ETC

Bends, cranks, etc. in steel reinforcement shall be carefully formed, and care being taken to keep bends out of winding. Otherwise all rods shall be truly straight. If any bend shows signs of cracking the rod shall be removed immediately from the site. Minimum radius of 9 times diameter of the bar shall be used unless otherwise specified in the drawings. However, in respect of standard hooks the radius of bend shall be 2 times the diameter of bar. Heating of reinforcement of bars to facilitate bending will not be permitted. The bars shall always be bent cold. In case of mild steel reinforcement bars of larger sizes where cold bending is not possible they may be bend by heating

with written permission of the Owner/Consultants. Bars when bent shall not be heated beyond cherry red colour and after bending, shall be allowed to cool slowly without quenching. The bars damaged or weakened in any way in bending shall not be used on the work. High strength deformed bars shall in no case be heated to facilitate bending or cranking.

#### 6.10 INSPECTION OF REINFORCEMENT

No concreting shall commence until the Owner/Consultants have inspected the reinforcement in position and until their approval have been obtained. A notice of at least 24 hours shall be given to the Owner/Consultants by the contractor for inspection of reinforcement. If in the opinion of the Owner/Consultants any materials are not in accordance with the specification or the reinforcement is incorrectly spaced, bent or otherwise defective, the contractor shall immediately remove such materials from the site and replace with new and rectify any other defects in accordance with the instruction of the Owner/Consultants and to their entire satisfaction.

#### 6.11 NETT MEASUREMENT

Reinforcements shall be placed as shown on the structural drawings and payment will be made on the nett measurements from drawings. Only such laps, dowels, chairs and pins in reinforcement as approved by the Owner/Consultants or shown on drawings shall be paid for. The contractor shall allow in his quoted rates for all wastage which will not be paid separately.

#### 6.12 STOCK PILING OF STEEL

Steel required shall be stock piled well in advance of need in the work. Contractor shall stock pile I/3 requirement within 15 days, 2/3rd requirement at I/4 contract time and full requirement at I/2 contract time or to suit the accepted work program.

#### 6.13 COVER FOR REINFORCEMENT:

Cover shall be measured from the outer surface of main reinforcement. Cover shall be as follows if not specified/shown in construction drawings.

- a) At each end of a reinforcing bar, 25 mm or twice the diameter of such rod or bar, whichever is greater.
- b) For longitudinal reinforcing bar in beams 25 mm or the diameter of such rod or bar, whichever is greater.
- c) For tensile, compressive shear or other reinforcement in a slab I5 mm or the diameter of such reinforcement whichever is greater.
- d) For reinforcement in any other member such as a lintel, chajja, canopy or pardi, 15 mm or the diameters of such reinforcements, whichever is greater.
- e) For main reinforcement in isolated footings (side and bottom) clear cover shall be 50 mm.
- f) For column bars clear cover shall be 40 mm, unless other-wise specified as in drawing. In case of columns of minimum dimension of 200 mm or under, whose reinforcing bars do not exceed I2 mm, minimum cover of 25 mm should be provided.
- g) For bars in slabs of strip footings and mat foundations the clear cover shall be 50 mm. Beam bars shall be placed over slab bars in respect of beam & slab type foundations.

#### 7.0 BRICK WORKS:

#### 7.1 BRICKS

- a) The bricks shall be locally available kiln burnt bricks of generally regular and uniform size, shape & color, uniformly well burn but not over burnt. The bricks shall be free from cracks, chips, flaws, stones or lumps of any kind and the rating of efflorescence shall not be more than "moderate", when tested as per IS.3495 of latest edition. They shall not have any part unburnt. They shall not break even after being dropped on the ground on their flat face in a standard condition from a height of 60 cms.
- b) The size of brick shall normally 250 mm x 125 mm x 75 mm or 230 mm x 115 mm x 65 mm. Bricks of one standard size shall be used on one work unless specially permitted by the Owner/Consultants.
- c) After immersion in water, absorption by weight shall not be exceed 20% of dry weight of the brick when tested according to IS 1077 of latest edition. Unless otherwise

specified the load to crush the brick when tested according to IS I077 of latest edition shall not be less than 75 Kg/Sq.cm.

d) Prior approval of Owner/Consultants shall be obtained for the brands of bricks to be used in the work after compliance with the above specifications/tests.

#### 7.2 MORTAR

Unless otherwise specified, mortar for brick work shall be composed of I part of cement to 6 parts of approved sand for walls of one brick thick (25 cm) and over and one part of cement to 4 parts of approved sand for half brick thick and brick on edge walls.

#### 7.3 CONSTRUCTION DETAILS

- a) Soaking. All brick shall be immersed in water for 24 hours before being put into work so that they will be saturated and will not absorb water from the mortar.
- b) Bats. No bats or cut bricks shall be used in the work unless absolutely necessary around irregular openings or for adjusting the dimensions of different course and for closers, in which case, full bricks shall be laid at corners, the bats being placed on the middle of the courses.
- c) Laying. The bricks shall be laid in mortar to line, level and shapes shown on the plan, slightly pressed and thoroughly bedded in mortar and all joints shall be properly flushed and packed with mortar so that they will be completely filled with mortar and no hollows left anywhere. Bricks shall be handled carefully so as not to damage their edges. They should not also be thrown from any height to the ground but should be put down gently. All course shall be laid truly horizontal and all vertical joints made truly vertical. Vertical joints on one course and the next below should not come over one another and shall not normally be nearer than quarter of a brick length. For battered faces beading shall be at right angles to the face. Fixtures, plugs, frames etc. if any, shall be built in at place shown in the plans while laying the courses only and not later by removal of bricks already laid. The top layer of bricks of one or more thick wall coming in contact with R.C.C beam, slab and at window sill level etc shall be laid on edge as per direction. Care shall be taken during construction to see that edges of Page 32<sup>⊥</sup> of 39<sup>⊥</sup>

bricks at quoins, sills, heads etc. are not damaged. The verticality of the walls and horizontality of the courses shall be checked very often with plumb bob and spirit level respectively. All external wall should have fair face on exterior surface.

d) Bond. Unless otherwise specified, brick work shall be done in English Bond. All walls, coming in contract with reinforced concrete columns, beams etc. should be properly bonded by inserting reinforcements. Extra labour shall be included in the rates (reinforcements will be measured and paid separately against reinforcement item provided in the Schedule of Quantities.

e) Joints. Joints shall not exceed I0 mm (about 3/8") in thickness and this thickness shall be uniform throughout. The joints shall be raked out not less than I0mm (about 3/18") deep when the mortar is green where pointing is to be done. When the brick surface are to be plastered, the joints shall be raked to a depth of 5 mm when the mortar is green, so as to provide good key to plaster.

f) Uniform Raising. Brick work shall be carried up regularly in all cases where the nature of work will admit, not leaving any part 60 mm lower than another. But where building at different levels is necessary, the bricks shall be stepped so as to give later at uniform level and effective bond. Horizontal courses should be to line and level, and face plumb or to later as shown on the plan. The rate of laying masonry may be upto a height of 80 cm (about 32") per day if cement mortar is used, and 45 cm (about 18") if lime mortar is used.

#### 7.4 CURING

All brick works shall be kept well watered for I4 days after laying. While pozzalana cement is used for mortar the curing shall be extended by one week at contractor's expense.

#### 7.5 RATES TO INCLUDE:

Apart from other factors mentioned elsewhere in this contract, the rates for items of brick work shall include for the following:

- a) All labour, materials, use of tools, equipment and other items incidental to the satisfactory completion of brick masonry at all heights and levels.
- b) Erecting and removing of all scaffolding, ladders and plant required for the execution of the work to the height and depths and shapes as shown on the plan or as ordered by the Owner/Consultants including extra labour and materials for using cut bricks in the construction of wall of varying thickness other than one brick, one and half brick, half brick and brick on edge walls as per drawings.
- c) Constructing brick work to lines, levels, batters, pillars, curve, projection, cutting, toothing etc. in strict conformity with the drawings and to any position or shape, to any heights or levels including raking out joints and housing frames, fixtures etc.
- d) Necessary charges of outside scaffolding work for construction of external brickwork from outside to have fair face on exterior surface.
- e) Curing brick work.
- f) Extra labour for bonding brick work to R.C. works as specified.
- g) Removing of all stains and adhering mortar lumps on the brick work surface.
- h) Cost of reinforcement in half brick walls and brick on edge walls.
- i) Raking out joints for receiving plaster as specified.

#### 7.6 MEASUREMENTS:

- a) Half brick thick and brick on edge walls shall be measured in sq.m unless otherwise mentioned.
- b) One brick wall and thicker walls shall be measured in cum. Brick walls upto and including 3 brick in thickness should be measured in multiples of half bricks which shall be deemed to be inclusive of mortar joints. Widths of more than three bricks in walls will be measured actually and limited to the width specified.
- c) No deduction or addition shall be made on any account for:-
- i) Ends of dissimilar materials (i.e. joists, beams, lintels, posts, girders, rafters, purlins, trusses, corbels steps etc.) upto 0.1 sqm in section.
- d) For details of measurements not mentioned elsewhere in the contract, the method of measurement should be as per relevant I.S. Code.

#### **8.0 CEMENT PLASTER (INTERNAL & EXTERNAL)**

#### a) Preparation of Surface

The walls to be plastered to have all joints raked out to a depth of 10 mm, if not already done. R.C.C surface shall be properly hacked to get good key to the plaster. All dust and oily matter, if any, shall be brushed and cleaned and surface to be plastered shall be kept wet for 6 hours before plastering is commenced.

#### b) Proportion of Mortar:

The plaster in walls, lintels, columns, ceiling, ceiling beams, projected slabs, rails, chajja, marquise, domes etc. shall be done with sand cement mortar in the proportion as described in the Schedule of Quantities). No more cement mortar shall be prepared than that can be used within half an hours.

#### c) Application of Plaster:

The mortar shall be applied evenly with force on the surface to be plastered. The mortar surface shall be finished at once by being rubbed over with a trowel till the cement appears on the surface. All corners, angles and junctions shall be truly vertical and horizontal as the case may be, carefully and neatly finished. Rounding of corners and junctions where required shall be done without extra charge. The mortar shall adhere to the surface intimately when set and there should be no hollow sound when struck.

- d) When neat cement finish is specified over the plaster surface, a coat of pure portland cement slurry, I.5 mm thick shall be applied and well rubbed to the plaster surface while the plaster surface is still fresh.
- e) When no finish is specified, the plastered surface shall be rubbed well to an even plane with a wooden float for external surface and finished smooth with a steel trowel for internal surface.
- f) Rates to include Apart from other factors mentioned elsewhere in the contract rates for the item of plaster shall include for the following:-
- i) Erecting, dismantling and removing the scaffolding.
- ii) Preparing the surface to receive the plaster.
- iii) Providing cement plaster of the specified average thickness.

iv) All labour, materials, use of tools and equipment to complete the plastering as per specification.

v) Curing for 7 days

vi) Any moulding work if shown on the drawings or as specified unless separately provided in the tender.

vii) Labour for plastering the surface in two operations when thickness of plaster is more than I2 mm thick.

viii) Plaster work in bends, arises, rounded angles, fair edges, narrow returns, quriks 'V' joints, splays, drip mouldings, making good to metal frame junctions with skirting of dados narrow width and small quantities, making good round pipes, conduits, timbers, sills, brackets, railings, etc and making good after all the sub-contractors or nominated sub-contractors have done their work.

ix) Neat cement finish when specified in the item.

g) Mode of Measurement

Plaster shall be measured in square metre.

#### SIGNATURE OF CONTRACTOR

Price-BID.

	BILLS OF QUANTITES FOR EA	ST RO	AD TENDE	:R		
PROJECT NAME: PROPOSED EXPANSION OF GREASES & LUBRICANTS UNIT AT BALMER LAWRIE & Co						
SI NO	DESCRIPTION OF WORK	UNIT	QUANTITY	RATE	AMOUNT	
1	Cleaning The Existing with wire brush and blowing dirt etc. with Air blower	SQ.M	975.00			
2	200mm Thick WMM					
	Wet Mix Macadam (Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver in sub- base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density.) and all as specified or directed by Engineer in charge.					
а	For Road & Paver blocks	CU.M	225.00			
3	Providing <b>shuttering</b> with Ply wood and removing centering, shuttering, strutting, propping etc., and removal of form work for foundations bases of columns and etc for mass concrete including cost of all materials, labour complete all as shown on drawing and all as specified or directed by Engineer in charge	SQ.M	37.00			
	REINFORCED CEMENT CONCRETE FOR ROAD					
4	Providing and laying in position cement concrete of specified grade including the cost of centering and shuttering All work -1:2:4 (1 cement: 2 m.sand : 4 graded stone aggregate 20mm nominal size)broom finished at Top of Surface all as specified or directed by Engineer in charge.					
а	For Road	CU.M	49.00			

	STEEL				
5	Providing and laying RCC flooring of mix M15with concrete hardener consisting of hardening compound @ 5kg/sq.m, the flooring shall be reinforced with 8mm dia HSD @200mm c/c (reinforcement measured seperately). The concrete to be laid and finished with screen board, vibrated, vaccum dewatering process and finally finished etc complete. Hardener make is SICA.	KG	950.00		
6	Construction joints shall be provided on concrete floor using stand on groove cutting machine of size 5mmx50mm. Cleaning the grooves provided by sand on cutting machine by using electrical operated blowers and brush cleaning to remove the fine debris. Taping both side of the joint using quality adhesive tapes of required width before filling the Bituminous/ equivalent sealing compound as one compound and application of polysulphide sealant on the groove as per the standard norms, procedures and all as directing engineer in-charge	R.m	85.00		
7	Providing and laying Machine pressed precast conctete interlocking paver block Required shape and size confirming to IS 15658-2006 of 60 mm thickness, M-20 Grade including quarry dust or suitable filling material all as specified or directed by Engineer in charge.	SQ.M	410.00		
8	Brick work in 230 mm thick wall with cement mortar 1:5 using best quality locally available bricks having a crushing strength of minimum 50 kg./Sq.cm. Including all scaffolding, curing, etc., all as specified or directed by Engineer in charge.	Cu.m	2.00		
9	Brick work in <b>115 mm thick</b> wall with cement mortar 1:5 using best quality locally available bricks having a crushing strength of minimum 50 kg./Sq.cm. Including all scaffolding, curing, etc., all as specified or directed by Engineer in charge.(Note: Every fourth layer of brickwork from the bottom to be reinforced with 2 nos 8mm dia bar or MS bufferrated patty).	SQ.M	20.00		
10	Supplying and filling with <b>quarry dust</b> /boulders/excavated earth (excluding rock) in layers not exceeding 40mm in depth, breaking clods, watering, consoilating each layer with power rammer or wooden or steel rammer including lead and lift, all as specified or directed by Engineer in charge.	CUM	25.00		
11	Other Micellaneous works, minor repairs, shifting of notice borads, cleaning existing drain, removing & placing of existing steel drain covers, repair of existing water drainage chamber, placing of 150mm dia pvc pipe etc., all as specified or directed by Engineer in charge.	LS	1.00		
			TC	OTAL AMOUNT	Rs. 0
			Ad	d GST @ 18%	Rs. 0
_			· <u></u>	GRAND TOTAL	Rs. 0

