CENTRAL COALFIELDS LIMITED Darbhanga House, Ranchi. (A Subsidiary of Coal India Limited)



DETAIL TENDER DOCUMENT

PART – I OF TENDER

Office of the Dy.GeneralManager (TA)

Web Tender document for NIT no 65 of 10-11

Central Coalfields Limited Office of the Dy.GeneralManager (TA) Darbhanga House, Ranchi.

No. Dy. GM(TA)/Tender/2010-11/DHC/4746-61

NOTICE INVITING TENDER Notice No. 65 of 10-11

Sealed tenders in two parts are invited from the reputed and experienced contractor for the following work in two wax sealed envelops:

1. Name of Department : Office of the DY.GM(TA),CCL,Ranchi.

2. Details of work:

SI. No.	Name of work	Estimated Cost in (Rs)	Earnest Money In (Rs.)	Cost of tender document In (Rs) (Non- refundable)	Time of Completion
1.	Re-wiring and replacement of D.B. and Sub D.B. and panel at CCL office, Kolkata.	3,00,767.50	3010/-	281.25 Inclusive of VAT@12.5%	2 months

Dated: 13.08.10

- 1. Tender documents can be obtained from the office of the :-
- (a) **Dy. General Manager (TA), CCL,** Darbhanga House, Ranchi from 18.08.10 to 24.08.10 (on any working days during working hours) on production of Cash receipt towards cost of T.D. The cost of T.D may be deposited in cash with the Cashier, CCL, Ranchi upto 1.00 PM from Monday to Friday and upto 12.00 noon on Saturday. Tender documents can also be purchased by depositing the cost of T.D in the form of bank draft of any Nationalized / Scheduled Bank in favour of Central Coalfields Limited, Ranchi payable at Ranchi.
- (b) Personnel Manager, CCL Office, Kolkata, Apeejay House, 15 park street, Kolkata-16, from 18.08.10 to 24.08.10 (on any working days during working hours) on production of Cash receipt towards cost of T.D. The cost of T.D may be deposited in cash with the Cashier, CCL Office, Kolkata, on all working days up to 1.00p.m. Tender documents can also be purchased by depositing the cost of T.D in the form of bank draft of any Nationalized / Scheduled Bank in favour of Central Coalfields Limited, Ranchi payable at Ranchi.
- 2. Earnest money is to be deposited in the form of Cash with the Cashier, CCL, Ranchi upto 1.00 PM from Monday to Friday and upto 12.00 noon on Saturday OR on any working days during working hours in CCL office Kolkata, or certified cheques and demand drafts of any Nationalised / scheduled Bank in favour of Central Coalfields Limited, Ranchi payable at Ranchi in a separate envelope along with the tender.

The date of preparation of DD should not be prior to the date of issue of NIT

- 3. (i) Tenders must be submitted in 2 (Two) parts as specified in the tender document in the office of Dy. General Manager (TA), CCL, Ranchi OR in the Office of the Personnel Manager, CCL Office, Kolkata, upto 3.00 p.m On 26.08.10
- (ii) Part-I of the tender will contain earnest money and documentary evidence in support of credentials of the tenderers as detailed in tender document whereas Part-II tender will contain price bid only. Part –II of the bid to be submitted in the second inner sealed envelope comprising of priced bill of quantities . Part-II tender of only those tenderers will be opened who will qualify on the basis of credentials submitted in Part I of the tender.

Part - I of the Tenders will be opened <u>on 30.08.10 at 12.00 noon</u> - in the office of **Personnel Manager**, **CCL Office**,15, **Park Street**, **Kolkata**.

- 4. The minimum eligibility criteria for consideration for award of the contract shall include the following
 - a) Average annual financial turnover of civil work during the last 3 (three) years, ending 31st March of the previous financial year (from 1.04.07 to 31.03.10) should be at least 30% of the estimated cost.
 - b) The intending tenderer must have in its name as a prime contractor in experience of having successfully completed similar works during last 7 (seven) years ending last day of month previous to the one in which bid applications are invited (i.e. eligibility period **from 01.08.03 to 30.07.10**) should be either of the following:

Three similar completed works each costing not less than the amount equal to 40% of the estimated cost.

OR

Two similar completed works each costing not less than the amount equal to **50%** of the estimated cost.

OR

One similar completed work costing not less than the amount equal to 80% of the estimated cost.

Similar nature of work shall mean:- "House Wiring"

Working experience of only Govt./Govt. owned organisation would be reckoned.

The intending tenderer must submit documentary evidence in support of 5 (a) & (b) above in the form of certified copy of work order, completion certificate, payment certificates/ vouchers indicating the period of work for which the payment has been made.

5. In addition, the intending tenderer has to submit the following:

The tenderer shall have to ensure implementation of PF & Miscellaneous Provision Act 1948 and allied

scheme. The tenderer should submit affidavit in this regard duly authenticated by Notary OR

Those tenderers who are registered under EPF scheme and their employees covered under the said

scheme may continue to operate under EPF scheme. They should furnish such proof.

- 6. The validity of tenders shall be 4 (four) months from the date of opening of price bid.
- Following documents are required to be submitted with Part- I of the tender.duly attested by gazeted officer /notary public
 - **a**). Proof of registration of firm,partnership deed,power of attorney proof of proprietorship etc.
 - **b)**. Credentials of satisfactory performance of contracts completed with full details of clients Location of work, cost and time taken for completion during the period as indicated at Sl.no. 4
 - .c). Current Bankers certificate of financial soundness. (Issued within last one year from the date of issue of Quotation Notice).
 - **d)**. Registration with appropriate Sales tax authority under VAT mentioning TIN no. and valid sales tax clearance certificate.
 - e). Photocopy of PAN card either of the firm or of the individual as the case may be.
 - f). Affidavit in Original as per "ANNEXURE- V", format may be obtained from the office of the undersigned
 - g). Particulars of registration / clearance from appropriate provident fund authority. Or an affidavit in original as per "ANNEXURE VIII", format may be obtained from the office of the undersigned
 - h) Valid Electrical Licence
- **8.** If any document submitted by the tenderer is found to be false on verification, legal / penal action will be taken against the tenderer including forfeiture of the earnest money & debarring from participating the tenderers in future.
- 9. CCL reserves the right to reject any or all the tenders without assigning any reason what so ever and to split up & distribute the work among more than one tenderer. All the tenderers should abide by prevailing contractual norms of the company.
- 10. All the pages of submitted document credentials should be signed by the tenderer including cutting/ overwriting if any.
- 11. Incomplete tenders and tender without EM shall be out rightly rejected.
- 12. The contractors shall be responsible to arrange at his own cost & risk all the materials, plant, machineries,, tools, labour etc including technical persons(if required)
- 13. The decision of CCL in awarding the work shall be final and cannot be subject to arbitration.
- 14. All the payments to the contractors shall be made through e- payment system of the company .
- 15. No subletting of work by the contractor is permissible.
- Further details may be had in Detail tender document. T.D can also downloaded directly from the web site of CCL (web site: www. ccl. gov. in). and cost of tender document through Demand Draft, (in a separate envelope) in favour of Central Coalfields Limited, Ranchi, payable at Ranchi. should be deposited along with tender document in separate envelop marked '3 'along with an undertaking that the T.D as available in the WEB SITE is acceptable to them and their tender may be rejected if any tampering in the T.D is found at the time of opening of tender and submit the tender on due date and time in place as specified. The Demand draft towards cost of tender document should be preapered on or before the closing date of sale of tender document as per NIT.

Dy. General Manager (T.A.)

C.C.L., Ranchi.

Distribution:

- 1. CG.M (C)CCL RANCHI./CMPDIL,kanke road,Ranchi
- 2. G.M (System), CCL Ranchi,-with a copy of Detail TD in compact disc for work for display in web
- 3. Dy.CE(E&M)/DHC/JNC
- 4. Dy. Chief Mining Engineer, CCL office, Apeejay House 15 park Street, Kolkata-
- 5. Dy.CFM,CCL, CCL office, Kolkata
- 6. Finance Manager, CCL office, Kolkata
- 7. Personnel Manager, CCL Office Kolkata, Apeejay House, 15 park street, Kolkata-
- 8. TS to DT(O),DT(PP),D(F),D(P)
 9. Chief of security- with request for arrangement of security personal in TA deptt near tender box on the date of receiving & opening of tender
- 10. CGM'S/GM'S of Argada/Barkakana/ Charhi/ Kuju/ Dhori/Giridih/Kargali/ NK/Piparwar/Rajhara/ Rajrappa/ Sayal.
- 11. FM(DP)
- 12. F.M (Cash)/CCL, Ranchi ./FM(Cash), CCL Office, Apeejay House ,15 park Street, Kolkata:No cash towards E.M. to be accepted for works valuing above 5 lakhs
- 13. SE(C) DHC, CCL, Ranchi.
- 14. Secreatery, Mines & Geology, Govt of Jharkhand, Nepal house, Doranda Ranchi.
- 15. **NOTICE BOARD**

TENDER DOCUMENT ISSUE DETAILS

NAME OF WORK :- Re-wiring and replacement of D.B. and Sub D.B. and panel at CCL office, Kolkata.

SEPARATE DOCUMENT WITH BOQ SHOULD BE DOWNLOADAD FOR EACH WORK AND TICK THE NAME OF WORK FOR WICH THE DOCUMENT IS DOWNLOADED FOR.

TENDER NOTICE NO. AND DATE - 65 .of 10-11 dt.13.08.10

DATE AND TIME OF SUBMISSION OF TENDER: Up to 3 pm on 26.08.10 in the office of Dy. General Manager (TA), CCL, Ranchi OR in the Office of the Personnel Manager, CCL Office, Kolkata

DATE AND TIME OF OPENING TENDER: at 12 noon on 30.08.10 in the office of the Personnel Manager, CCL Office,15, Park Street, Kolkata.

COST OF TENDER DOCUEMTNT: Rs. 281.25 Inclusive of VAT @12.5 %

ISSUED TO / SUBMITTED BY:

NAME OF TENDERER : POSTAL ADDRESS :		
e-mail address Telephone No. Mobile No.		- - -
Against deposit of cost of ter	er document vide CR / DD No	Dated
This document contains – and		

For C.G.M. (Civil), CCL, Ranchi Dy. GM (TA), CCL, Ranchi SO(C), Area

BASIC INFORMATION FOR BIDDERS

Name of work: Re-wiring and replacement of D.B. and Sub D.B. and panel at CCL office, Kolkata.

1. (To be superscripted on

tender covers / envelops)

Sealed tenders in 2 parts will be received in the Office of the Dy. GM (TA), CCL, Ranchi/ OR in the Office of the Personnel Manager, CCL Office, Kolkata

2. Closing of receipt of tenders ... up to 3 pm .. on 26.08.10

Opening of Part-I of tenders at 12 noon on 30.08.10 in the office of the Personnel Manager, CCL Office,15, Park Street, Kolkata.

- 3. Opening of part –I I of the tenders : to be notified to all the successful bidders in Part I of the tenders.
- 4. Sale of tender document: from -18..08.10. TO 24.08.10
- 5. Price of tender document (non-refundable) to be paid in cash / bank draft at RANCHI/

Rs. 281.25 Inclusive of VAT @12.5 %

- 6. Earnest Money deposit in the form of Bank draft from Nationalized Banks drawn in favour of CENTRAL COALFILD LIMITED and payable at Ranchi No interest is payable on this earnest money deposit even in case of successful bidders in whose cases the money will be retained for conversion as part of security deposit.
- 7. Validity of tender from date of opening of Part-II of the tender or revised price bid, if any : 4 (four) months.
- 8. In case of tender document down loaded from the web site the cost of T.D (fee) should be submitted in a separate envelope marked PART –III. along with a undertaking that the tender documents as available in the website is accepted and their tender may be rejected, if any tampering in the tender document is found to be done at the time of opening of tender.

CONTENTS OF PART – I / CHECK LIST

PART – I OF TENDER SHOULD CONTAIN

- a. Details of Earnest Money. AS MENTIONED IN NIT (refer CL3. OF DETAIL TENDER NOTICE)
- b. In case of Firms, registration or proof of application for registration, partnership Deed and Power of attorney in the case of partnership firms, affidavit regarding proprietorship in the case of proprietorship firm/Articles of Association, Memorandum in the case of Company / declaration of individual concern.
- c. Photo copy of PAN card of income tax and Valid sales tax registration / clearance /, Under prevailing sale tax rule of state.
- d. Credentials on satisfactory performance of contracts completed in the past as per the following

Eligibility Criteria:-

- (a) Average annual financial turnover of Civil works during the last 3 (three) years ending 31st March of the previous financial years should be at least 30% of the estimated cost.
- (b) Experience of having successfully completed similar works during last 7 (Seven) years ending last day of Month previous to the one in which applications are invited should be either of the following

Three similar completed works costing not less than the amount equal to 40% of the Estt. Cost.

OR

Two similar completed works costing not less than the amount equal to **50%** of the Estt. Cost.

OR

One similar completed work costing not less than the amount equal to **80**% of the Estt. Cost.

<u>Definition of similar nature of work:</u> AS MENTIONED IN ENCLOSED NIT

WORKING EXPERIENCE ONLY IN GOVT./ GOVT OWNED ORGANISATION WOULD BE RECKONED.

In all the above cases, while considering the value of completed works, the full value of completed work be considered whether or not the date of commencement is within the said seven years period.

- e) Affidavit to the effect that none of the partners of the firm has either individually or collectively been involved in criminal offences AND ALL THE CREDENTIALS SUBMITTED BY THEM ARE GENUINE in the enclosed format.(SEE ANNEX-V)
- f) Affidavit to the effect in the enclosed format that the agency shall not employ on this contract any close relative of CCL's employee. Should the tenderer being an individual have a relative employed in CCL or in the case of partnership firm / or company under the Indian Company's Act and if, such firm / or company under the partner / shareholder whose relative is employed in CCL. The same should be declared at the time of submission of tenders failing which the tender may be rejected if such fact subsequently comes to light and the contract may be rescinded if already entered into (SEE ANNEX-V).
- g) Details of construction equipment to be deployed on the job.

The contractor must submit documentary evidence of possession of or have firm arrangement with others road making machines such as Hot-mix plant, Paver mechanical power, grader and Road Roller and all survey equipments required for road construction.

- h) Any nationalized Bank's reference/certificate of transactions in a year in the recent past for business of executing contracts assets owned, if any etc.
- i) Tender document issued by CCL (PART I) every page should be duly signed.

CCL Reserves full right to reject any tender at Part –I stage in case any information as required is lacking in Part-I of tender and no appeal against CCL's decision will be entertained.

- j) .
- k)
- I) Tenderer(s) submit an affidavit regarding genuineness of the credential submitted by them.
- m) All the format / information's must be filled / provided duly authenticated by the Tenderer. Incomplete tenders will be rejected outright.
- n) The tenders should go through NIT requirement carefully regarding eligibility criteria and other and ensure submission of relevant documentary evidence alongwith the date.
- o) Declaration to the effect that no condition has been given in the price bid envelope no. II.
- p) Particulars of registration / clearance from appropriate provident fund authority or affidavit in original that the tenderer shall ensure implementation of PF & Miscellaneous Provision Act 1948 and allied scheme (SEE ANNEX-VIII). PART II OF THE TENDER SHOULD CONTAIN

Price – bid indicating the rate offered along with the schedule of quantities each page duly signed

(Also refer to instruction in enclosed NIT)

PROCEDURE & SYSTEM OF E-TENDERING

1. Tenderers who want to download the T.D. directly from the CCL Website, they may do so in the following manner:

Download the Part - I

Download the Part - II

- 2. Use separate envelops for Part I and Part II and enclose them together in another covering envelope for each work.
- 3. Strike off the work, which is not applicable (if any).
- 4. Separate tender is required to be submitted for each work (if applicable).
- 5. All the pages of tender must be signed.
- 6. Part II envelope should contain signed BOQ of relevant work with quoted rate on **percentage basis** / **item rate basis** as indicated.
- 7. For other information detailed tender notice may be referred to.
- 8. For any query, may contact Office of Dy. General Manager (TA) (During Office Hours) Central Coalfields Limited, Darbhanga House, Ranchi Phone No. 0651 2360308.
- 9. Utmost care has been taken to place the correct information / data as per original TD. However, if the tenderer finds any discrepancy in the downloaded T.D. that might have occurred due to inadvertent error / problems in downloading, they are requested to preferably go through the master copy of the T.D. available in the Office of **Dy. GM (TA)**/ to sort out the same, if they feel so.
- 10. While submission of the downloaded tender document, the tenderer must enclose a certificate that "the tender document has been downloaded from website & in case it is found that the documents are tampered, the tender will be summarily rejected".
- 11. The company shall not be responsible for any delay/difficulties/inaccessibility of the downloading facility for any reason whatsoever. The downloading facility shall be available during the period of sale of tender paper.
- 12. The bidders who will download the tender documents from the website of the company, will be required to pay the cost of tender documents (application fee) by bank draft prepared on or before the closing date of sale of tender document as per NIT at the time of submission of tenders in a separate envelope marked PART-II.
- 13. The bidders will be required to submit an undertaking that they will accept the tender documents as available in the website and their tender shall be rejected, if any tampering in the tender document is found to be done at the time of opening of tender.

- 14. The bank draft towards the cost of tender documents (application fee) and the undertaking of the tenderer as at sl. No. iv shall be submitted in a separate envelop marked "cost of tender documents and the undertaking" and not with part-IEMD.
- 15. In case of any discrepancy between the tender documents downloaded from the web site and the master copy available in the office, the latter shall prevail and will be binding on the tenderers. No claim on this account will be entertained.

LETER SUBMITTING TENDER

То
Dear Sirs,
With reference to the tender invited by you for the construction
I / We do hereby offer to execute the works under contract at the respective rate mentioned in the bill of quantity I / We have examined the Drawings, seen the site and read the articles of agreement, conditions of contract, specifications and special clauses forming part of the bill of quantity. I / We agree to finish the whole of the works within
order to start work.
I / We have deposited Rs (Rupees) only by Cash / Bank draft (Nationalized bank) in favour of CCL, Ranchi agains cost of tender document.
I / We have deposited as Earnest Money Rs(Rupees
\ensuremath{I} / We understand that you are not bound to accept the lowest or any tender that you receive.
Name of partners of the firm :

DECLARATION
I/We hereby declare that there is no condition in Envelope No. II i.e. Price bid.
Signature of Tenderer

Tenders submitted on before P.M.

Name of our Bankers

DETAILED TENDER NOTICE

- 1. Sealed tenders in prescribed forms and parts with the name of works superscribed as:- Re-wiring and replacement of D.B. and Sub D.B. and panel at CCL office, Kolkata. (description of work, place, Tender Notice No and date) on each of the envelopes are invited from bonafide and experienced contractors and will be received at the office of Dy. General Manager (TA), CCL, Darbhanga House Ranchi. OR in the Office of the Personnel Manager, CCL Office, Kolkata ..(address to be given) upto 3.00pm on 26.08.10 All tenders will be opened at 12 noon. on 30.08.10 in the office of the Personnel Manager, CCL Office,15, Park Street, Kolkata. in the presence of the attending tenderers or their authorised representatives who wish to be present .In case where the tender is in two parts, only Part-I, will be opened on the above day and time.
 - 2 (a) Tenders should be submitted in the prescribed form in time. These forms together with the proposed contract document including specifications and tender drawings (if available) may be obtained from the above office during normal working hours on payment of Rs. 281.25 Inclusive of VAT @12.5 % for each works also refer NIT.as Application Fee for each set. The payment may be made either in Cash or by Bank Draft drawn in favour of .CCL, Ranchi Bank payable at Ranchi. General specification and description of work is enclosed with the tender document.
- 2 (b) Any Bids received after the deadline prescribed at Clause 1 above due to any reasons whatsoever will not be accepted.

In the event of the specified date for the submission of bids being declared a holiday by the employer, the bids will be received upto the appointed time on the next working day.

- 2 (c) Tenders thus submitted shall consist of the following:
 - i) Complete set of tender documents as sold, duly filled in and signed on all pages and at different places as required of the tender documents including Part I & Part II of the tenders as per the tender notice as applicable.
 - ii) Sales-tax clearance certificate copy attested by a Gazetted Officer of the Govt. (Central or State)
 - iii). PAN (Permanent I. Tax Account Number)
 - iii) Earnest money deposit (as specified hereafter)
 - iv) Power of Attorney in the case the tender is signed by an authorised representative of the tenderer.
 - v) Full name and address of the tenderer shall be written on the bottom left hand corner of the sealed covers.
- **2 (d)** The tender document in which the tender is submitted by the tenderer shall become the property of the Company and the Company shall have no obligation to return the same to the tenderer.
- 2 (e) The Tender shall be submitted,

EITHER

* in Two Envelope System with the first envelope containing credentials (duly authenticated by the bidder) in support of his qualifications in accordance with the eligibility criteria along with the EMD in a

separate envelope and the second envelope containing the duly filled in Tender Document superscribing Envelope I , II and EMD on the cover

OR

* in two parts as indicated in the Notice Inviting Tenders. Part-I shall consist of any deviations from terms & conditions of the tender and additional terms & conditions and if asked for, technical bid and credentials (documentary evidence in support of eligibility criteria and bid assessment duly authenticated by the bidder) and the original tender document issued to the bidder duly signed by authorized signatory of the bidder on all pages as proof of accepting the conditions of contract (excluding the price bid).

Part II shall consist of tender documents as sold to the tenderers duly filling in rates, amounts etc. i.e. price bid.

The Earnest Money Deposit is to be submitted in a separate Envelope altogether; super-scribing "Earnest Money Deposit"; and not inside the envelope containing Part I or part II of the Bid.

The bidders, who will download the tender documents from the website of the company, will be required to pay the cost of tender documents (Application Fee) by Bank Draft as per NIT at the time of submission of tenders.

The bidders will be required to submit an undertaking that they will accept the tender documents as available in the website and their tender shall be rejected if any tampering in the tender document is found to be done at the time of opening of tender.

The Bank Draft towards the cost of tender documents (Application Fee) and the undertaking of the tenderer as above shall be submitted in a separate envelope marked "Cost of Tender Documents and the Undertaking" and not with Part-I/ EMD.

In case of any discrepancy between the tender documents downloaded from the web site and the master copy available in the office, the latter shall prevail and will be binding on the tenderers. No claim on this account will be entertained.

The Part I & Part II should also be put into separate sealed envelopes superscribed as such. Thereafter all the three envelopes (four envelopes in case of Bidders using downloaded Bid document) should be submitted in a sealed envelope with appropriate superscription.

The date of opening of the Second Envelope or Part II of the tenders shall be communicated in due course after consideration of First Envelope or Part-I.

(* STRIKE OUT WHICHEVER IS NOT APPLICABLE AS PER THE ESTIMATED VALUE OF THE WORK)

- **2 (f)** Each bidder shall submit only one bid for one package. A bidder who submits or participates in more than one bid (other than as sub-contractor or in case of alternatives that have been permitted or requested) will cause all the proposals with the bidders' participation to be disqualified.
- 3. Earnest Money/ Bid Security @1% of the estimated cost (rounded of to nearest hundred rupees subject to maximum of Rs.50.00 lakhs) is to be deposited in the form of irrevocable Bank Guarantee (from Scheduled Bank/ Branch acceptable to the owner) with validity 28 days beyond the validity of the Bid in the format given in the Bid Document in a separate envelope alongwith the tender. Certified Cheques and Demand Drafts will also be acceptable as Earnest Money/ Bid Security drawn in favour of CCL, Ranchi Coalfields Ltd. on any scheduled Bank payable at its branch at Ranchi.For works valued up to Rs. 5 lakhs the earnest money may be deposited in cash or in the aforesaid form. In case of earnest money deposit by cash, cash receipt is to be submitted in a separate envelope alongwith the tender. Earnest Money/ Bid Security of the unsuccessful bidder shall be refunded as promptly as possible after opening of Price Bid and finalization of the tender and shall bear no interest.
- **4.** No tender shall be considered unless accompanied by the said Earnest Money.

- 5. The earnest money will be retained in the case of successful tenderer and refunded to the unsuccessful tenderer in due course and will not carry any interest. The unsuccessful bidder for this purpose means the bidders who have not qualified for opening of Part II (price bid) and those who have not emerged as L-1 tenderer after opening of price bid. The earnest money deposited by the successful tenderer will be dealt with as provided elsewhere in the tender documents.
- **6 (a)** Site Investigation Report: The contractor, in preparing the bid, shall rely on the site investigation report referred to in the bid document, supplemented by any information available to the bidder.
- **6 (b).** Every tenderer is expected, before quoting his rates, to go through the requirements of materials/workmanship under specification/requirements and conditions of contract and to inspect the site/area of the proposed work.

In case of item rate tender a schedule of quantities is enclosed with the tender document. He should quote specific rate for each item in the schedule and the rates shall be in rupees and paise. The rates shall be written both in words and figures and the unit in the words and the amount against each item totaled. In the event of any discrepancy between the description in words and figures, the description in words will prevail. The rates for the work should be inclusive of all incidentals, overheads, all taxes, Octroi's, duties, leads, lifts, carriage, tools & plant etc. as required for execution and completion of the work. It shall be deemed that the tenderer has visited the site/area and got fully acquainted with the working conditions and other prevalent conditions and fluctuations thereto whether they actually visited the site/area or not and have taken all the above factors into account while quoting his rates.

- **7 (a)** Corrections where unavoidable, shall be made by crossing out and rewriting duly authenticated with full signature and date by the tenderer. Erasing or over-writing in the tender documents may disqualify the tender.
- **7 (b)** The tender shall be submitted either in English or in Hindi.
- **7 (c)** Cost of Bidding: The bidder shall bear all costs associated with the preparation and submission of his bid and the Employer will in no case be responsible and liable for those cost
- **8.** The tenderer shall closely study all specification in detail, which govern the rates for which he is tendering.
- **9.** Sales-tax clearance certificate for the last financial year or the last assessment whichever is later or proof of filing the returns for the previous financial year should accompany the tender.
- **10.** The work should be completed within One yer for work at sl no 1&2, Two months for work at sl 3& 4. from expiry of ten (10) days from the issue of letter of acceptance of tender/work order or handing over the site or handing over reasonable number of working drawings to the contractor or the period of mobilisation allowed in the work order for starting the work in special circumstances, whichever is latest.
- 11. On completion of the work all rubbish, debris, brick bats etc. shall be removed by the contractor(s) at his/their own expense and the site cleaned and handed over to the company and he/they shall intimate officially of having completed the work as per contract.
- 12. The Company does not bind itself to accept the lowest tender and reserves the right to reject any or all the tenders without assigning any reasons whatsoever and to split up the work between two or more tenderers or accept the tender in part and not in its entirety.
- 13. The tenderer(s) will indicate the equipment/machinery/ vehicles he/they is/are going to use on this job and also give adequate evidence of experience in doing similar works and financial capacity to complete the work in time.
- **14.** The tenderer(s) should also state what technical/ supervisory personal he/they would be employing for supervising the work.

14 (a). Full information should be given by the tenderer in respect of following:

i) If an individual: Full name.

Postal Address. Place of Business.

ii) If proprietary firm: Name of the Proprietor.

Full postal address of Firm/ Proprietors.

iii) If partnership firm: Full name of partners.

Full postal addresses of the registered office of firm &

the partners.

Registered partnership Deed.

iv) In case of Company: Date and place of registration.

Memorandum & Articles of Association.

Name of all the Directors.

Full postal address of the registered office & all Directors.

v) Joint Venture Two or three companies/ contractors participating in the tender as Joint

Venture should submit Firm-wise participation details, Banker's name, execution of work with details of contribution of each and

all other relevant details.

Notes: Joint ventures must comply the following requirements:

i) The minimum qualification requirements for joint ventures: The qualifying criteria parameter e.g. experience, financial resources etc. of the individual partners of the J.V. will be added together and the total criteria should not be less than as spelt out in qualification criteria.

- ii) The formation of joint venture or change in the joint venture character/ partners after submission of the bid and any change in the bidding regarding joint venture will not be permitted.
- iii) Any bid shall be signed so as to legally bind all partners jointly and severally and any bid shall be submitted with a copy of the Joint Venture Agreement (JV Agreement) providing the joint and several liabilities with respect to the contract.
- iv) The pre-qualification of a joint venture does not necessarily pre-qualify any of its partners individually or as a partner in any other joint venture or association. In case of dissolution of a joint venture, each one of the constituent firms may pre-qualify if they meet all the pre-qualification requirements, subject to written approval of the employer.
- v) The bid submission must include documentary evidence to the relationship between joint venture partners in the form of JV Agreement to legally bind all partners jointly and severally for the proposed agreement which should set out the principles for the constitution, operation, responsibilities regarding work and financial arrangements, participation (percentage share in the total) and liabilities (joint and several) in respect of each and all of the firms in the joint venture. Such JV Agreement must evidence the commitment of the parties to bid for the facilities applied for (if pre-qualified) and to execute the contract for the facilities if their bid is successful.
- vi) One of the partners responsible for performing a key component of the contract shall be designated as Lead Partner. This authorization shall be evidenced by submitting with the bid a Power of Attorney signed by legally authorized signatories of all the partners.

- vii) The JV Agreement must provide that the Lead Partner shall be authorized to incur liabilities and receive instructions for and on behalf of any and all partners of the Joint Venture and the entire execution of the contract shall be done with active participation of the Lead Partner.
- viii) The contract agreement should be signed jointly by each Joint Venture Partners.
- ix) An entity can be a partner in only one Joint Venture. Bid submitted by Joint Ventures including the same entity as partner will be rejected.
- x) The J.V. agreement may specify the share of each individual partner for the purpose of execution of this contract. This required only for the sole purpose of apportioning the value of the contract to that extend to individual partner for subsequent submission in other bids if he intends to do so for the purpose of the qualification in that tender.

14(b) Change in Constitution of the Contracting Agency:

Prior approval in writing of the company shall be obtained before any change is made in the constitution of the contracting agency, otherwise it will be treated as a breach of Contract.

- **15.** Canvassing in connection with the tenders in any shape or form is strictly prohibited and tenders submitted by such tenderers who resort to canvassing shall be liable for rejection.
- **16 (a)** Every Tenderer will have to submit a declaration in support of the authenticity of the credentials submitted by him along with the Tender in the form of an AFFIDAVIT as per the format provided at ANNEXURE VI.
- **16 (b)** If a Tenderer deliberately provides wrong information or submits false credentials in support of his qualifications, the Company reserves the right to terminate/rescind the contract, forfeit the EMD and other dues of the contractor and to take any other action as may be deemed fit.*

* (STRIKE OUT WHICHEVER IS NOT APPLICABLE)

- **17 (a)** An intending tenderer, after obtaining tender documents on payment of Application Fee, having doubts as to the meaning of any part of the tender documents may submit to the official inviting tender a written request for interpretation or clarification thereof. Any interpretation or clarification of the tender documents by formal addendum if issued by the official inviting tender, shall be final and valid and binding on the company and the tenderers.

(Pre-bid meeting will be held for turnkey civil works only.).

18. Tender Evaluation & Bid Assessment:

The Tenders received will be scrutinized and evaluated by a duly constituted Tender Committee.

The Tender Committee will examine the Comparative Statements prepared by the concerned technical department and will satisfy itself that all aspects/conditions of each offer has been properly evaluated with respect to financial implications etc.

Tenders received without Earnest Money will be rejected.

The deviations from the commercial terms & conditions & the Tender specifications are scrutinized before opening of price bids. Normally no deviations in the commercial terms & conditions will be accepted.

However, the Tender Committee may decide to scrutinize the different conditions given by the tenderers and formulate and freeze the acceptable conditions and intimate all the tenderers about the same and give them an opportunity to revise their price bid if necessary before opening the same.

The Price Bids are opened at the time and place fixed for the same in presence of the tenderers & committee members and due information for opening of Price Bid is to be given to all concerned. In case where the tenderers are given opportunity to revise their Price Bids, only the revised price bids are opened and the original Price Bids are to be kept in tact in the custody of the company.

The Price Bids of the tenderers will have no condition. The Price Bids which are incomplete & not submitted as per instructions given in the Tender Document will be rejected.

Bidders who meet the minimum qualifications criteria will be qualified only if their available bid capacity is more than the updated estimated value. The available bid capacity will be calculated as under:

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

where,

A= Maximum value of Civil Engineering Works executed in any one year during the last five years (updated to present level @ 5% per calendar year) taking into account the completed as well as works in progress.

N= Number of years prescribed for completion of the works for which bids are invited.

B= Value at present price level, of existing commitments and on going works to be completed during the nextmonths (period of completion of works for which bids are invited)

Financial turn over and cost of completed works of previous works shall be given a weightage of 5% per year (average annual rate of inflation) to bring them at current price level, while evaluating the qualification requirement and bid assessment of the bidders.

Even though the bidders meet the above qualifying criteria, they are subject to be disqualified if they have made misleading or false representations in the forms, statements and attachments submitted in proof of the qualifying requirements, information on Bid Capacity (works for which bids have been submitted and works which are yet to be completed) as on the date of this bid.:

1 (A) Existing commitments and on going works.

Description of work	Place & State	Contract No.& Date	Name and address of Employer	Value of Contract (Rs.lakh)	Stipulated period of completion	Value of works remaining to be completed	Anticipated date of completion
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)

1 (B) Works for which bids already submitted.

Description of work	Place & State	Estimated value of works (Rs.lakhs)	Stipulated period of completion	Date when decision is expected	Remarks if any
(1)	(2)	(3)	(4)	(5)	(6)

2. Works performed as prime contractor (In the same name) on works of a similar nature over the last seven years **

	Project Name	Name of employer	Description of work	Contract No.	Value of contract (Rs.lakh)	Date of issue of work order	Stipulated period of completion	Actual date of completion	explaining reasons for delay
_									and work completed

3. Quantities of work executed as prime contractor (in the same name and style) in the last seven years**:

(Table given below is a typical example & the contents may vary depending upon the nature & scope of work)

Year	Name of the work	Quantity of w	Remarks		
		Cement concrete	Masonry	Earth Work	(indicate contract
		(Includin	g RCC & PCC)		ref.)
19 20					
20 20					
20 20					
20 20					
20 20					

- 1. Enclose a certificate(s) from Engineer(s)-in-charge.
- 2. Immediately preceding the financial year in which bids are received.

(THE SYSTEM OF DETERMINATION OF BID ASSESSMENT CAPACITY AS ABOVE WILL BE USED ONLY IN CASE OF WORKS OF ESTIMATED VALUE OF OVER Rs. 1 CRORE.)

No document presented by the bidder after the closing date & time of the bid will be taken into account unless it is of purely technical nature which has no bearing financially on the contract & which does not seek major changes in the technical specifications given in the bid documents. If a bidder offers a rebate unilaterally after the closing date & time of the bid, it will not be taken into account for evaluating purposes by the Tender Committee, but if that bidder emerges as the lowest evaluated, the rebate offered will be taken into account for determination of the total offer.

If the bid of the successful bidder is seriously unbalanced in relation to the estimate of the cost of work to be performed under the contract, the company may require the bidder to produce detailed price analysis for any or all items of the Bill of quantities to demonstrate the internal consistency of these prices with the construction method and the schedule proposed. After evaluation of the price analysis, the company may require that the amount of the performance security/security deposit is increased at the expense of the successful bidder to a level sufficient to protect the company against financial loss in the event of default on the part of the successful bidder under the contract.

19. Negotiations:

Negotiations will be held only if the lowest rate received is not reasonable and the decision of the company regarding reasonableness of rates quoted will be final and binding on the bidders.

Work will be awarded to the lowest bidder (L1) without post tender negotiations if the rates are reasonable. If rates are not reasonable, negotiations with L1 only may be undertaken to arrive at a reasonable rate.

20. Banned or delisted Contractors:

The bidders would give a declaration that they have not been banned or delisted by any Govt. or Quasi Govt. agencies or PSU's. If a bidder has been banned or delisted by any Govt. or Quasi Govt. agencies or PSU's this fact must be clearly stated and it may not necessarily be a cause for disqualification. If the declaration is not given, the bid will be rejected as non-responsive.

- 21. On receipt of letter for acceptance of the tender issued by the Company, the successful tenderer shall execute/accept contract agreement/work order in the company's prescribed form for the due fulfillment of the contract. Failure to enter into the required contract/accept the work order issued by the company within the specified period in the work order shall entail cancellation of letter of acceptance of tender/work order and forfeiture of the earnest money. The written contract/ work order to be entered into between the contractor and the company shall be the foundation of the rights of both the parties and the contract shall not be deemed to be executed until the contract/ work order is signed/ accepted by both the parties i.e. Contractor and the Company.
- **22(a)** The validity period of the tenders shall be 4 (four) months from the date of opening of price bid or revised price bid, if any.

The tenderer shall not, during the said period or within the period extended by mutual consent, revoke or cancel his tender or alter the tender or any terms/conditions thereof without consent in writing of the company. In case the tenderer violates to abide by this, the Company will be entitled to forfeit the Earnest Money and reject the tender.

- **22 (b)** The Company reserves the right to postpone the date of receipt and opening of tenders or to cancel the tenders without assigning any reason whatsoever.
- **23.** The Company reserves its right to allow Public Enterprises purchase preference facility as admissible under prevailing policy.
- **24.** This detailed Tender Notice shall be deemed to be part of the Contract Agreement/Work Order.
- **25.** No subletting of work as a whole by the contractor is permissible. Subletting of work in piece rated jobs is permissible with the prior approval of the department.

The Contract Agreement will specify major items of supply or services for which the contractor proposes to engage sub-contractor/sub-vendor. The contractor may from time to time propose any addition or deletion from any such list and will submit proposals in this regard to the Engineer-in - Charge/Designated Officer in charge for approval well in advance so as not to impede the progress of work. Such approval of the Engineer in Charge / Designated Officer in Charge will not relieve the contractor from any of his obligations, duties and responsibilities under the contract.

26. In case the contractor enters into any litigation, such action should have to be taken in a court of law with jurisdiction over the place where the subject work is to be executed.

GENERAL TERMS AND CONDITIONS

1. Definitions

- i) **"Employer"** or "Company" means the Coal India Limited or any of its subsidiaries who will employ the contractor represented by the appropriate authority.
- ii) "Principal Employer" means the Coal India Limited or any of its subsidiaries or the officer nominated by the Company to function on its behalf.
- iii) The word **"Contractor/ Contractors"** wherever occurs means the successful tenderer/ tenderers who has/have deposited the necessary Earnest money and has/have been given written intimation about the acceptance of tender and shall include legal representative of such individual or persons composing a firm or a company or the successors and permitted assignees of such individual, firm or Company, as the case may be.
- "Site" means the land and places including any building and erection thereon, over, under, in or through which the Permanent works or Temporary works designed by the Engineer in Charge are to be executed and any other lands and places provided by the Employer for working space or any other purpose as may be specifically designated in the Contract as forming part of the site.
- v) The term **"Sub-Contractor"** as employed herein, includes those having a direct contract with Contractor either on piece rate, item rate, time rate or any other basis and it includes one who furnishes work to a special design according to the plans or specifications of this work but does not include one who merely supplies materials.
- vi) "Accepting Authority" shall mean the management of the company and includes an authorized representative of the company or any other person or body of persons empowered in this behalf by the company.
- vii) "Engineer-in-charge" shall mean the officer nominated by the company in the Civil Engineering cadre/ discipline who is competent to direct supervisors and authorized to be in charge of the works for the purpose of this contract. The Engineer in Charge /Designated Officer in Charge who is of an appropriate seniority, will be responsible for supervising and administering the contract, certifying payments due to the contractor, valuing variations to the contract, awarding extension of time and valuing compensation events. The Engineer in Charge /Designated Officer in Charge may further appoint his representatives i.e. another person/Project Manager or any other competent person and notify to the contractor who is directly responsible for supervising the work being executed at the site, on his behalf under their Delegation of Powers of the company. However, overall responsibility, as far as the contract is concerned, will be that of the Engineer in Charge/Designated Officer in Charge.
- viii) The **"Contract"** shall mean the notice inviting tender, the tender as accepted by the Company, the work order issued to the contractor, and the formal contract agreement executed between the company and the contractor together with the documents referred to therein including general terms and conditions, special conditions, if any, scope of work, frozen terms & conditions/technical parameters/scope of work and revised offer, if any, specifications, drawings, including those to be submitted during progress of work, schedule of quantities with rates and amounts.
- ix) A "Day" shall mean a day of 24 hours from midnight to midnight.
- x) The **"Work"** shall mean the works required to be executed in accordance with the contract/work order or parts thereof as the case may be and shall include all extra or additional, altered or substituted works or any work of emergent nature, which in the opinion of the Engineer-in-charge, become necessary during the progress of the works to obviate any risk or accident or failure or become necessary for security.

- xi) "Schedule of Rates" referred to in this conditions shall mean the standard schedule of rates prescribed by the company and the amendments issued from time to time.
- xii) "Contract amount" shall mean:
 - a) in the case of turnkey contracts the total sum for which tender is accepted by the company.
 - b) in the case of other types of contracts the total sum arrived at based on the individual rates quoted by the tenderer for the various items shown in the "Schedule of Quantities" of the tender document as accepted by the Company with or without any alteration as the case may be.
- xiii) **"Written notice"** shall mean a notice or communication in writing and shall be deemed to have been duly served if delivered in persons to the individual or to a member of the contractors firm or to an office of the company for whom it is intended, or if delivered at or sent by registered mail to the last business address known to him who gives the notice.
- xiv) "The constructional plant" means all appliances, tools, plants or machinery or whatsoever nature required in or about the execution, completion or maintenance of the works but does not include materials or other things intended to form part of the permanent work.
- xv) "Letter of Acceptance of Tender" means letter giving intimation to the tenderer that his tender has been accepted in accordance with the provisions contained in that letter.
- xvi) "Department" means the Civil Engineering Department of Coal India Limited or any of its subsidiary companies/units represented by the appropriate authority.
- xvii) "Act of insolvency" means as it is designed by Presidency Town Insolvency Act or Provincial Insolvency Act or any act amending such originals.
- xviii) The words indicating the singular only also include the plural and vice-versa where the context so requires.

2. Contract Documents:

The following documents shall constitute the contract documents:

- i) Notice Inviting Tender/Detailed Tender Notice.
- ii) Articles of Agreement / Letter of Acceptance of Tender/ Work Order.
- iii) General Terms & Conditions of contract/ Commercial Terms & Conditions of contract.
- iv) Additional Terms & Conditions of contract, if any.
- v) Specifications.
- vi) Schedule of quantities (or Bill of Quantities)/ Schedule of work/ Scope of work and schedule of deviation (to be provided by the contractor.)
- vii) Frozen terms & conditions / technical parameters/ scope of work and revised offer, if any.
- viii) Contract drawings and work programme.
- ix) Safety Code etc. forming part of the tender.
- **N.B. Deviations:** Deviations sought by the bidders, whether they are technical or commercial deviations, must only be given in the schedules prescribed for them. Any willful attempt by the bidders to camouflage the deviations by giving them in the covering letter or in any other documents than the prescribed schedules may render the bid itself as non-responsive.
- 2.1 The contractor shall enter into and execute contract agreement in the prescribed form (ref. format at ANNEXURE VII). The cost of the stamp papers for the contract agreement shall be borne by the contractor. Two sets of contract document/agreements shall be prepared and signed by both the parties One of the sets shall be stamped "Original" and the other "Duplicate". The duplicate copy will be supplied to the contractor free of cost and the original is to be retained by the company. For any additional copies required by the contractors the price to be charged would be that of the cost of the Tender Document (Application Fee).

All additional copies should be certified by the Engineer in Charge.

The contractor shall keep copy of these documents on the site/place of work in proper manner so that these are available for inspection at all reasonable times by the Engineer-in-charge, his representatives or any other officials authorised by the company for the purpose.

2.2 The contract document shall not be used by the contractor for any purpose other than this contract and the contractor shall ensure that all persons employed for this contract strictly adhere to this and maintain secrecy, as required of such documents.

2.3 Tender Evaluation & Bid Assessment [Refer clause 18 of Detailed Tender Notice]

2.4. Abnormally High Rate (AHR) & Abnormally Low Rate (ALR) Items.

Abnormally High Rates & Abnormally Low Rates, if quoted by the contractor, in item rate tenders will be identified & dealt with as under:

- i) For identification of AHR & ALR items the ceiling of +/- 20% respectively, when compared with the updated estimated rate ,will be considered.
- ii) Variation in Quantity on quoted rate during execution for AHR & ALR items shall be permitted upto +/-25%(+25% for AHR & -25% for ALR) of the quantity provided for items of work below plinth level & +/- 5% of the quantity provided for items of work above plinth level respectively.
- iii) Quantity variation beyond the limit mentioned at ii) above shall be dealt by arriving at new rate based on prevalent market rates of materials & labour analysed as per standard analysis of rate of N.B.O./ C.P.W.D. Payment of extra quantity over the permitted quantity of +/-25% and +/-5%(as the case may be) would be made on the basis of the new analysed rate.
- iv) For identified abnormally low rate (ALR) items, the contractor will be required to deposit with the company the difference in amount calculated between the departmental justified rate multiplied by the quantity of a particular ALR item and the ALR rate quoted by the contractor multiplied by the quantity of the same item.

The total amount to be deposited will be the sum total of all the identified ALR items calculated as per the method outlined above.

The amount so retained will be refunded on successful completion of individual ALR items of work.

2.5 Negotiations:

[Refer clause 19 of Detailed Tender Notice]

2.6 Acceptance of Offer:

Letter of Acceptance is an acceptance of offer by the company and it need not be accepted by the tenderer. But the tenderer should acknowledge the receipt of the order within 15 days of mailing of work order and any delay in acknowledging the receipt will be treated as a breach of contract and compensation for the loss caused by such breach will be declared by the company by forfeiting EMD.

2.7 Banned or delisted Contractors: [Refer clause 20 of Detailed Tender Notice]

3. Discrepancies in contract documents & Adjustments thereof

The documents forming part of the contract are to be treated as mutually explanatory of one another and in case of discrepancy between schedule of quantity, the specifications and/or drawing, the following order of preference shall be observed;

- a) Description in Bill of Quantities of work.
- b) Particular specification and special conditions, if any
- c) Drawings.
- d) General specifications.
- **3.1** In the event of varying or conflicting provision in any of the document(s) forming part of the contract, the Accepting Authority's decision/clarification shall hold good with regard to the intention of the document or contract as the case may be.

- **3.2** Any error in description, quantity or rate in Bill of Quantities or any omission there from, shall not vitiate the contract or release the contractor from discharging his obligations under the contract including execution of work according to the Drawings and Specifications forming part of the particular contract document.
- **3.3** Any difference detected in the tender/ tenders submitted resulting from :
 - a) discrepancy between description in words and figures, the rate which corresponds to the amount worked out by the contractor shall be taken as correct.
 - b) discrepancy in the amount quoted by the contractor due to calculation mistake of the unit rate and quantity, the unit rate shall be regarded as firm and amount corrected.
 - c) when the amount of an item is not worked out by the contractor or it does not correspond with the rates written either in figures or words, then the rates quoted by the Contractor in words shall be taken as correct.
 - d) in the case of percentage rate tender, the Contractors are required to quote their rates both in amount as well as in the percentage below/above the rates entered in the Schedule. In such cases in the event of Arithmetical error committed in amount by the contractor, the tender percentage and not the amount should be taken into account.
 - e) discrepancy in totaling or carry forward in the amount quoted by the contractor shall be corrected

The tendered sum so corrected and altered shall be substituted for the sum originally tendered and considered for acceptance instead of the original sum quoted by the tenderer alongwith other tender/tenders. Rounding off to the nearest rupee should be done in the final summary of the amount instead of in totals of various sections of the offer.

4. Security Deposit:

- **4.1.1** Security Deposit shall consist of two parts;
 - a) Performance Security to be submitted at award of work and
 - b) Retention Money to be recovered from running bills.

The security deposit shall bear no interest.

- **4.1.2** Performance Security should be 5% of contract amount and should be submitted within 28 days of receipt of LOA by the successful bidders in any of the form given below
 - a Bank Guarantee in the form given in the bid document
 - Govt. Securities, FDR or any other form of deposit stipulated by the owner
 - Demand Draft drawn in favour of Coalfields Ltd on any Scheduled Bank payable at its Branch at...........

The Earnest Money/ Bid Security deposited in the form of Bank Guarantee shall be discharged when the Bidder has signed the Agreement and furnished the required Performance Security/ Security Deposit. The bid security deposited in the form of Demand draft/ cash shall be adjusted against the security deposit.

If performance security is provided by the successful bidders in the form of bank guarantee it shall be issued either -

- (a) at Bidder's option by a nationalized/ Scheduled Indian Bank or
- (b) by a foreign bank located in India and acceptable to the employer.
- (c) the validity of the Bank Guarantee shall be for a period of one year or ninety days beyond the period of contract, whichever is more.

Failure of the successful bidder to comply with the requirement as above shall constitute sufficient ground for cancellation of the award of work and forfeiture of the bid security.

- **4.2..1** All running on account bills shall be paid at 95% (ninety five percent) of work value. This 5% (five percent) deduction towards Retention Money will be the second part of security deposit.
- **4.2.2**. 5% Performance Security should be refunded within 14 days of the issue of defect liability certificate (taking over certificate with a list of defects). Retention Money should be refunded after issue of No Defect Certificate. Retention Money should be deducted at 5% from running bills.
- **4.3** The Bank Guarantee towards security deposit shall be acceptable only for values above Rs.50, 000/-and the Bank Guarantee shall also be valid for a minimum period of one year or ninety days beyond the period of contract, whichever is more.. Bank Guarantee is to be submitted in the format prescribed by the company. Bank Guarantee shall be irrevocable and will be from amongst the list of Banks (Scheduled Banks) provided in the bid document.
- 4.4 The Company shall be at liberty to deduct/appropriate from the security deposit such sums as are due and payable by the contractor to the company as may be determined in terms of the contract, and the amount appropriated from the security deposit shall have to be restored by further deduction from the contractors subsequent on account running bills, if any.

The refund of security deposit shall be subject to company's right to deduct/ appropriate its due against the contractor under this contract or under any other contract.

- **4.5** On completion of the entire work and issue of defect liability certificate (taking over certificate with a list of defects) by the Engineer-in-charge, one half of the security deposit remaining with the company shall be refunded. The other half shall be refunded to the contractor after issue of No Defect Certificate by the Engineer-in-Charge. on the expiry of Defect Liability Period of six months, subject to the following conditions:
 - a) Any defect/defects in the work, if detected after issue of defect liability certificate is/are rectified to the satisfaction of the Engineer-in-Charge within the said period.
 - b) In the case of building work or other work of similar nature, the refund shall be made on the expiry of the said six months period or at the end of one full monsoon period i.e. June to September, whichever is later in point of time and any defects such as leakages in roof, effloresces in walls, dampness, defects in drainage etc. should be rectified to the satisfaction of Engineer-in-Charge.

5. Deviations/Variations in Quantities and Pricing

The quantities given in the "Schedule of Quantities" are based on estimates and are meant to indicate the extent of the work and to provide a uniform basis for tendering and any variation either by addition or omission shall not vitiate the contract.

5.1 The company through its Engineer In Charge or his representative shall, without radically changing the original scope and nature of the work, under contract, have power to make any alterations in or additions to or substitution of the original specifications, drawings, designs and instructions that may appear to be necessary or advisable during the progress of the work.

The contractor shall be bound to carry out the works in accordance with the instructions given to him in writing by the Engineer In Charge or his representative on behalf of the company. Such altered or additional or substituted work, which shall form part of the original contract, shall be carried out by the contractor on the same terms and conditions in all respects on which they agreed to do the main work and at the same rate/rates as are specified in the contract/ work-order.

- **5.2** The right is reserved to cancel any items of work included in the contract agreement or portion thereof in any stage of execution if found necessary to the work and such omission shall not be a waiver of any condition of the contract nor invalidate any of the provisions thereof.
- 5.3 If the additional, altered or substituted work includes any class of work for which rate/rates is/are not specified in the contract/work order, rates for such items shall be determined by the Engineer In Charge as follows:

- a) In the case of percentage tenders, if the rate for the item of work executed is available in the company's approved SOR, it will be paid at the schedule rate plus or minus the accepted percentage as per contract,
- b) In case of item rate tenders, the rate for extra item shall be derived from the rate for similar item or near similar item of work available in the agreement schedule of work or by analysis of rates as at (c) below and the lower rate out of the above two shall be considered.
- c) In case the rate for extra item is to be derived by analysis of rate, the same shall be done by analysis on prevalent market rate of materials and labour based on standard norms of analysis of rate of N.B.O./C.P.W.D.
- d) In case of combined tender with partly item rate for non-schedule items & partly percentage tenders for SOR items, the rate for extra item shall be derived as at (b) above in case of non-schedule items rates and in case of percentage rates for SOR items the rate for extra item shall be derived as at (a) above.

In case of any difference between the contractor and the Engineer-In Charge as to the fixation of rates, the matter shall be referred to the accepting authority of the company i.e. CGM(C)/GM(C)/CE(C) of the company or Staff Officer(C) for the work awarded at Company Hqrs. level and Area level respectively, whose decision shall be final and binding on the contractor.

- **5.4** Payment for such deviated items (additional/ altered / substituted items of work or excess quantities of work beyond +/- 25% of the agreement schedule) shall be made in the contractors running on account bills, till the revised estimate regularising these items are sanctioned by the competent authority of the company, at the provisional rates and shall not exceed :
 - a) 75% of the rate recommended by the Engineer In Charge to the accepting authority of the company i.e. CGM(C)/GM(C)/CE(C) of the company or SO(C) of the Area , if the rate is directly available in the SOR of the company.
 - b) 50% of the rate recommended by the Engineer In Charge to the accepting authority of the company, i.e. CGM(C)/GM(C)/CE(C) of the company or SO(C) of the Area , if it is analysed item rates based on prevalent market rates of materials and labour following NBO/CPWD norms.
- 5.5 The time for completion of the originally contracted work shall be extended by the company in the proportion that the additional work (in value) bears to the original contracted work (in value) plus 25% of the time calculated as explained above or such further additional time as may be considered reasonable by the Engineer in Charge.
- 5.6 The company through its Engineer In Charge or his representative, on behalf of the company, shall have power to omit any part of the work in case of non-availability of a portion of the site or for any other reason and the contractor shall be bound to carry out the rest of the work in accordance with the instructions given by the Engineer In Charge. No claim from the Contractor shall be entertained/ accepted on these grounds.
- **5.7** In the event of any deviation being ordered which in the opinion of the contractor changes radically the original scope/nature of the contract, the contractor shall under no circumstances suspend the work, either original or altered or substituted, and the dispute/disagreement as to the nature of deviation and the rate/rates to be paid for such deviations shall be resolved separately with the company as per the procedures/ norms laid down hereafter.

6. Time for Completion of Contract, Extension thereof, Defaults and Compensation for Delay

Time is the essence of the contract and as such all works shall be completed within the time stipulated in the contract/ work order.

Immediately after the contract is executed/the work order is issued, the Engineer In Charge and the contractor shall agree upon a detailed time and progress chart prepared based on BAR CHART/ PERT CPM techniques on the basis of a construction schedule submitted by the contractor at the time of

executing contract showing the order in which the work is proposed to be carried out within the time specified in the contract document/work order.

For the purpose of this detailed time and progress chart, the work shall be deemed to have commenced on the expiry of 10 (ten) days from the issue of Letter of Acceptance of Tender/Work Order or handing over the site of work or handing over reasonable number of working drawings to the contractor or the period of mobilisation allowed in the work order for starting the work in special circumstances, whichever is later.

6.1 If the contractor, without reasonable cause or valid reasons, commits default in commencing the work within the aforesaid time limit, the company shall without prejudice to any other right or remedy, be at liberty, by giving 15 days notice in writing to the contractor to commence the work, to forfeit the Earnest Money deposited by him and to rescind the Letter of Acceptance of Tender/Work Order.

Additionally, the Company will reserve the right to debar such defaulting Contractors from participating in future Tenders for a minimum period of 1 (One) year.

6.2 If the contractor fails to maintain the required progress in terms of the agreed time and progress chart or to complete the work and clear the site on or before the contract or extended date of completion, he shall without prejudice to any other right or remedy available under the law to the company on account of such breach, pay as compensation (Liquidated Damages) @ half percent (1/2%) of the contract price per week of delay. The aggregate of such compensation/ compensations shall not exceed 10 (ten) percent of the total value as shown in the contract.

This will also apply to items or group of items for which separate period of completion has been specified. The amount of compensation may be adjusted or setoff against any sum payable to the contractor under this or any other contract with the company.

- **6.2.1** The company, if satisfied, that the works can be completed by the contractor within a reasonable time after the specified time of completion, may allow further extension of time at its discretion with or without the levy of L.D. In the event of extension granted being with L.D, the company will be entitled without prejudice to any other right or remedy available in that behalf, to recover from the contractor as agreed damages equivalent to half percent of the contract value of the works for each week or part of the week subject to a ceiling of 10% of the contract price.
- **6.2.2** The company, if not satisfied that the works can be completed by the contractor, and in the event of failure on the part of the contractor to complete work within further extension of time allowed as aforesaid, shall be entitled, without prejudice to any other right, or remedy available in that behalf, to rescind the contract.
- **6.2.3** The company, if not satisfied with the progress of the contract and in the event of failure of the contractor to recoup the delays in the mutually agreed time frame, shall be entitled to terminate the contract.
- **6.2.4** In the event of such termination of the contract as described in clauses 6.2.2 or 6.2.3 or both, the company, shall be entitled to recover L.D. upto ten percent (10%) of the contract value and forfeit the security deposit made by the contractor besides getting the work completed by other means at the risk and cost of the contractor.
- **6.3** a) The company may at its sole discretion, waive the payment of compensation on request received from the contractor indicating valid and acceptable reasons if the entire work is completed within the date as specified in the contract/work order or as validly extended date without stipulating any compensation for delay. **or**
- b) If the progress of the work or of any portion of the work is unsatisfactory, the Engineer In-charge shall be entitled, after giving the contractor 15 days' notice in writing, to employ another Agency for executing the job or to carry out the work departmentally either wholly or partly debiting the contractor with

the cost involved in engaging another Agency or the cost involved in executing the work departmentally, as the case may be. The certificate to be issued by the Engineer In-charge for the cost of the work so done shall be final and conclusive and the extra cost, if any, shall be borne by the contractor.

- **6.4** Extension of date of completion: On occurrences of any events causing delay as stated hereunder, the contractor shall intimate immediately in writing to the Engineer In Charge.
- a) Force Majeure:
 - i) Natural phenomena, including but not limited to abnormally bad weather, unprecedented flood and draught, earthquakes & epidemics.
 - ii) Political upheaval, civil commotion, strikes, lockouts, acts of any Govt. (domestic/foreign) including but not limited to war, proprieties, quarantine embargoes

The successful bidder/ contractor will advise in the event of his having to resort to this clause by a registered letter duly certified by the local chamber of commerce or statutory authorities, the beginning and end of the cause of delay, within fifteen days of the occurrence and cessation of such Force Majeure condition.

In the event of delay due to Force Majeure for more than one month the contract may be terminated at the discretion of the company. Termination under such circumstances will be without any liability on either side.

- b) Serious loss or damage by fire
- c) Non-availability of stores which are the responsibility of the company to supply as per contract
- d) Non-availability of working drawings in time, which are to be made available by the company as per contract during progress of the work
- e) Delay on the part of the contractors or tradesmen engaged by the company not forming part of the contract, holding up further progress of the work
- f) Non-availability or breakdown of tools and plant to be made available or made available by the company
- g) The execution of any modified or additional items of work or excess quantity of work.
- h) Any other causes which, at the sole discretion of the company, is beyond the control of the contractor.
- **6.4.1 A HINDRANCE REGISTER** shall be maintained by both department and the contractor at site to record the various hindrances, as stated above, encountered during the course of execution.

Hindrance register will be signed by both the parties. The contractor may also record his observations in the Hindrance Register. In case the contractor has a different opinion for hindrance and a dispute arises then the matter would be referred to the EIC and or the next higher authority whose decision would be final & binding on the contractor & the decision to be communicated within 15 days.

- **6.4.2** The contractor shall request the company in writing for extension of time within 15 days of happening of such event causing delay stating also, the period for which extension is required. The company may, considering the genuinity of the request, give a reasonable extension of time for completion of the work. Such extension shall be communicated to the contractor in writing by the company through the Engineer In Charge within 1(one) month of the date of receipt of such request.
- **6.4.3** The opinion of the Engineer-in-charge, whether the grounds shown for the extension of time are or are not reasonable, is final. If the Engineer-in-charge is of the opinion that the grounds shown by the contractor are not reasonable and declines to the grant of extension to time, the contractor can not challenge the soundness of the opinion by reference to arbitration.

The opinion of the Engineer-in-charge that the period of extension granted by him is proper or necessary is not, however, final. If the contractor feels that the period of extension granted is inadequate he can appeal to the CGM(Civil)/ GM(Civil)/ CE(Civil) of the company for consideration on the question whether the period of extension is or is not proper or necessary.

- **6.4.4** Provisional extension of time may also be granted by the Engineer In Charge during the course of execution, on written request for extension of time within 15(fifteen) days of happening of such events as stated above, reserving the company's right to impose/ waive penalty at the time of granting final extension of time as per contract agreement.
- **6.4.5** When the period fixed for the completion of the contract is about to expire, the question of extension of the contract may be considered at the instance of the Contractor or the Department or of both. The extension will have to be by party's agreement, express or implied.

In case the contractor does not apply for grant of extension of time within 15(fifteen) days of the hindrance occurring in execution of the work and the department wants to continue with the work beyond the stipulated date of completion for reason of the work having been unavoidably hindered, the Engineer-incharge can grant extension of time even in the absence of application from the contractor.

Such extension of time granted by the Engineer In Charge is valid provided the contractor accepts the same either expressly or implied by his actions before and subsequent to the date of completion. Such extension of time shall be without prejudice to Company's right to levy compensation under the relevant clause of the contract.

The contractor shall however use his best efforts to prevent or make good the delay by putting his endeavors constantly as may be reasonably required of him to the satisfaction of the Engineer In Charge.

7. Material Supply & other facilities

- 7.1* The company does not undertake any responsibility for supply of any materials to the contractor.

 Or
- **7.1*** The company will supply steel both reinforcement and structural and cement at the following rates inclusive of all taxes. The contractor shall bear all the cost for transportation; handling and storage from the issuing store of the company to contractor's work site store.

i) Reinforcement Steel:-

ii)

a) M.S.Round : Rs. b) Tor Steel : Rs. c) Structural Steel : Rs. Cement : Rs.

[* delete whichever is not applicable]

7.2 If the steel is issued by the department, the wastage of steel shall be the barest minimum. The wastage allowed from theoretical quantity will be upto a maximum of 5% to cover the wastage due to cutting into pieces, bending and other factors. No cut pieces or scrap less than 2 mtr. in length will be taken by the department. Efforts should be made to use the cut pieces of 2 mtr. or above length as far as possible.

If the wastage of steel is more than the permissible variation mentioned above the cost of excess wastage made by the contractor shall be recovered at double the issue rates indicated above, or 115% of prevailing market rate including sales tax and general tax during the period of work, whichever is more.

No allowances shall be entertained on account of Rolling Margin for the steel either issued by the department or procured by the contractor.

7.3 If the cement is issued by the department, the variation of 5% will be permitted over the theoretical consumption of cement for value of work upto Rs.10.00 lakhs and 3% for value of work above Rs.10.00 lakhs. In the event of cement consumed is more/less than specified above, the recovery for the quantity of cement consumed in excess or less than the specified quantity shall be made at double the issue rate or 115% of prevailing market rate including sales tax and general tax during the period of work, whichever is more.

- 7.4 In case the department is not able to supply cement/steel as per the provisions of the contract, the Engineer In Charge may allow, with the approval of CGM(Civil)/ GM(Civil)/ CE(Civil) of the company, the contractor in writing for procurement of cement/ steel from the approved sources and the extra on this account including transport charges, if any, over the issue rate shall be reimbursed to the contractor on production of authentic documents. Transportation of cement/ steel from the place of purchase to the site of work and proper storage of cement/steel at site shall be contractor's responsibility. He should maintain proper account of cement/steel issued/procured by him and should allow inspection of his godown and his cement/steel account by the concerned Engineer-in-charge or any other authorised officers of the company. Contractor should draw materials from the company on the basis of actual requirement as assessed by the Engineer In Charge on "as and when required" basis.
- **7.5** Recovery of cost of materials issued on sale A/c will be made as per actual consumption basis but the Engineer In Charge will have the discretion for making full recovery while processing a particular bill or asking for the return of the balance materials if the work is not progressing satisfactorily.

The contractor shall keep accurate record of materials issued by the company, maintain proper account for the materials received and consumed in the work and shall be open to check by the Engineer In Charge or his authorised representative. The contractor shall ensure that such materials are consumed for the contract works only and the Register for the aforesaid account shall be signed both by the representatives of Engineer In Charge and the contractor.

- **7.6** All materials, tools and plants brought to site by the contractor including the materials supplied by the company shall be deemed to be held in lien by the company and the contractor shall not have the right to remove the same from the site, without the written permission of the Engineer In Charge. The company shall not however be liable for any loss, theft or damage due to fire or other cause during this period of lien, the responsibility for which shall lie entirely on the contractor.
- **7.7** The contractor shall bear the cost of loading, transportation to site, unloading, storing under cover as required etc. as may be necessary for the use and keeping the materials in good condition.
- 7.8 Any surplus materials issued by the company, remaining after completion or termination of the contract, shall be returned by the contractor at his cost to the place of issue and the Engineer In Charge shall accept the same at the rate not exceeding the rate at which these were originally issued taking into consideration the deterioration or damage, if any, that may have been caused during the custody of the contractor. In the event, the contractor fails to return the surplus materials out of those supplied by the company, the Engineer In Charge may, in addition to any other liability which the contractor would incur in this regard, by giving notice in writing require the contractor to pay the amount at double the issue rate for such unreturned surplus materials or 115% of the prevailing market rate including Sales Tax & General Tax during the period of work, whichever is more.
- **7.9** On completion or on termination of the contract and on complete recovery of secured advance paid by the company, if any, in respect of materials brought to site, the contractor with due permission of the Engineer In Charge shall be entitled to remove at his expenses all surplus materials originally supplied by him and upon such removal, the same shall become the property of the contractor.
- **7.10** All charges on account of octroi, terminal or sales tax and other duties on materials obtained for the works from any source (excluding materials supplied by the company) shall be borne by the contractor.
- **7.11** The contractor shall arrange necessary electricity at his own cost for the work and his own establishment. However, if available and feasible the company may arrange electricity at one point near the work site and necessary recovery of cost of energy consumed will be made at rates prescribed by the company from time to time. Energy meter for this purpose shall be provided by the contractor.
- **7.12** The contractor shall arrange necessary water for the work and his own establishment. However, if available and feasible the company may arrange water at one point near the work site for which recovery @ 1% of the contract value of work done will be made from the contractor's bills.
- **7.13** Coal required for manufacturing of bricks to be used in the work will be issued @ 25 tonnes per one lakh of bricks on payment at the rate prevailing on the date of issue. Requirement of coal may vary depending on the quality of coal. Transportation of coal and the charges thereof shall be contractor's responsibility.

7.14 Explosives, detonators and other inflammable materials shall not be used in the execution of the work at site by the contractor without prior written permission of the Engineer In Charge. Transportation and storage of such materials shall be done in specified manner in accordance with the law in force. The contractor shall also obtain licence under such laws for, transportation, storage, use and all other operations, connected with the handling of the same.

8. Quality Assurance - Materials and Workmanship

The contractor shall carry out and complete the work in every respect in accordance with the contract and shall ensure that the work conforms strictly to the drawings, specifications, instructions of the Engineer In Charge In Charge may issue, from time to time, further drawings, detailed instructions/ directions in writing to the contractor. All such drawings, instructions/directions shall be consistent with the contract documents and should be reasonably inferable therefrom, alongwith clarifications/ explanations thereof, if necessary.

- **8.1** For Quality Assurances of all the Civil Engineering Works the norms/ guidelines laid down by the company herein and elsewhere will form part of the contract for the purpose of quality of works.
- **8.2** The contractor shall be responsible for correct and complete execution of the work in a workman like manner with the materials as per specification which shall be subject to the approval of the company. All work under execution in pursuance of the contract shall be open to inspection and supervision by the Engineer In Charge or by his authorised representative or any other official of higher rank or any other person authorised by the company in his behalf & the contractor shall allow the same.
- **8.3** All materials to be provided by the contractor shall be in conformity with the specifications/schedule of work as per the contract and the contractor shall furnish proof, if so required by the Engineer In Charge to his satisfaction that the materials do so comply.
- **8.4** The contractor shall immediately after the award of work draw up a schedule giving dates for submission of samples as required or necessary as per the specification for approval of Engineer In Charge who shall approve ,if found acceptable, promptly so that there is no delay in the progress of the work of the contractor or of the work of any of the sub-contractor.

On receipt of samples as per schedule, the Engineer In Charge shall arrange to examine/test with reasonable promptness ensuring conformity of the samples with the required specification and complying with the requirements as per contract documents keeping in view that the work shall be in accordance with the samples approved by him. The contractor shall not start bringing materials at the site unless the respective samples are approved. Materials con-forming to approved samples shall only be brought to site.

Samples are to be supplied by the contractor at his own cost. The cost involved in tests shall be borne by the contractor. If any test is ordered by the Engineer In Charge which is to be carried out by any independent person or agency at any place other than the site even then the cost of materials and testing charge etc. shall be borne by the contractor. If the test shows that the materials are not in accordance with the specifications, the said materials shall not be used in the work and removed from the site at contractors cost.

8.5 The company, through the Engineer In Charge, shall have full powers to reject any materials or work due to a defect therein for not conforming to the required specification, or for materials not being of the required quality and standard or for reasons of poor workmanship or for not being in accordance with the sample approved by him. The contractor shall forthwith remedy the defect/replace the materials at his expense and no further work shall be done pending such rectification/replacement of materials, if so instructed by the Engineer In Charge.

In case of default on the part of the contractor, the Engineer In Charge shall be at liberty to procure the proper materials for replacement and/or to carry out the rectifications in any manner considered advisable under the circumstances and the entire cost & delay for such procurement/rectification shall be borne by the contractor.

8.6 The Engineer In Charge shall be entitled to have tests carried out for any materials, according to the standard practice followed for such tests, other then those for which satisfactory proof has already been furnished by the contractor who shall provide at his expense all facilities which the Engineer In Charge may require for the purpose.

The cost of any other tests, if so required by the Engineer In Charge, shall be borne by the contractor only, if the test shows the workmanship or materials not to be in accordance with the provision of the contract or the instruction of Engineer In Charge, but otherwise by the company.

- **8.7** Access to the works: The Engineer-in-charge and any person authorised by the company shall at all times have access to the works and to all workshops and places where work is being prepared or from where materials, manufactured articles are being obtained for the works and the contractor shall afford every facility for and every assistance in or in obtaining the right to such access.
- **8.8 Inspection of works:** i) No work shall be covered up or put out of view without the approval of the Engineer-in-charge or the Engineer-in-charge's representative or any other officer nominated by the company for the purpose and the contractor shall afford full opportunity for the EIC or EIC's representative or any other officer nominated by the company for the purpose to examine and measure any work which is about to be covered up or put out of view and to examine foundations before permanent work is placed thereon, the contractor shall give due notice to the Engineer-in-charge's representative whenever any such work or foundations is ready or about to be ready for examination and the Engineer-in-charge's representative shall, without unreasonable delay, unless he considers it unnecessary and advises the contractor accordingly, attend for the purpose of examining and measuring such work or foundations.
- ii) The contractor shall uncover any part or parts of the works or making openings in or through the same as the Engineer In Charge may from time to time direct and shall reinstate and make good such part or parts to the satisfaction of Engineer-in-charge.

If any such part or parts have been covered up or put out of view after compliance with the requirement of sub-clause above and are found to be executed in accordance with the contract, the expenses of uncovering, making openings in or through and making good the same shall be borne by the Employer, but in any other cases all costs shall be borne by the contractor.

8.9 Removal of Improper Work and Materials:

- i) The Engineer-in-charge shall during the progress of the works have power to order in writing from time to time :
 - a) The removal from the site, of any materials which in the opinion of Engineer-in-charge, are not in accordance with the contract/ work order/ approved sample.
 - b) The substitution with proper and suitable materials.
 - c) The removal and proper re-execution, notwithstanding any previous test thereof or interim payment thereform, of any work which in respect of materials or workmanship is not in accordance with the contract.
- ii) In case of default on the part of the contractor in carrying out such order, the Engineer-in -charge shall be entitled to employ and pay other agency to carry out the same and all expenses consequent thereon shall be recoverable from the contractor or may be deducted from any amount due or which may become due to the contractor.
- **8.10** Devaluation of Work: In lieu of rejecting work done or materials supplied not in conformity with the contract/work order/approved samples, the Engineer-in-charge or any other officer nominated by the company for the purpose may allow such work or materials to remain, provided the Engineer In Charge/ the officer nominated by the company is satisfied with the quality of any materials, or the strength and structural safety of the work, and in that case shall make such deduction for the difference in value, as in his opinion may be reasonable.
- **8.11** Final Inspection of Work: The Engineer-in-charge and any other officer nominated by the company for the purpose shall make final inspection of all work included in the contract/work order, or any portion thereof, or any completed structure forming part of the work of the contract, as soon as practicable after notification by the contractor that the work is completed and ready for acceptance. If the work is not

acceptable to the Engineer-in-charge at the time of such inspection, he shall inform the contractor in writing as to the particular defects to be remedied before final acceptance can be made.

- **8.12** Defects appearing after acceptance: Any defects which may appear within the defect liability period and arising, in the opinion of the Engineer-in-charge, from lack of conformance with the drawings and specifications, shall, if so required by the Engineer-in-charge in writing, be remedied by the contractor at his own cost within the time stipulated by the Engineer-in-charge. If the contractor fails to comply, the Engineer-in-charge may employ other persons to remedy the defects and recover the cost thereof from the dues of the contractor.
- **8.13 Site Order Book**: A Site Order Book is a Register duly certified by the Engineer-in-charge regarding number of pages it contains, each page being numbered, name of work, name of contractor, reference of contract/ work order and the aforesaid certificate should be recorded on its first page.

Site Order Books shall be maintained on the sites of works and should never be removed therefrom under any circumstances. It shall be the property of the company. The Engineer In Charge or his authorised representative shall duly record his observations regarding any work which needs action on the part of the contractor like, improvement in the quality of work, failure to adhere to the scheduled programme etc. as per contract/work order. The contractor shall promptly sign the site order book and note the orders given therein by the EIC or his representative and comply with them. The compliance shall be reported by the contractor in writing to EIC in time so that it can be checked.

The Site Order Book will be consulted by the Engineer In Charge at the time of making both running on account and final bills of the contractor. A certificate to this effect should be given in the Measurement books by the Engineer In Charge or his representative.

- **8.14** Samples and Testing of Materials: All the materials to be procured by the contractor and to be used in work shall be approved by the Engineer In Charge in advance, and shall pass the tests and analysis required by him, which will be as specified in the specifications of the items concerned and or as specified by BIS or the IRC standard specifications acceptable to the Engineer In Charge. The method of sampling and testing shall be as per the relevant BIS, IRC and other relevant standards and practices. Minor minerals like sand, stone chips etc. shall be conforming to relevant BIS standards. All bought out items including Cement and Steel shall be procured from such manufacturers who hold valid license conforming to relevant BIS standards for manufacturing of such items.
- **8.15** Storage of Materials: Materials shall be so stored as to ensure the preservation of the quality and fitness for the work. When considered necessary by the Engineer-in-charge, they shall be placed on wooden platforms or other hard, clean surfaces and not directly on the ground.

Materials shall be placed under cover when so directed and the contractor shall erect and maintain at his own cost temporary weather-proof sheds at the work site for the purpose. Stored materials shall be so located as to facilitate prompt inspection. All stored materials shall be inspected at the time of use in the work, even though they may have been inspected and approved before being placed in storage or during storage.

8.16 Defective Materials: All materials not conforming to the requirements of the specifications shall be considered as defective, and all such materials, whether in place or not shall be rejected. They shall be removed immediately by the contractor at his expenses and replaced with acceptable material.

No rejected material, the defects of which have been subsequently corrected, shall be used on the work until approval in writing has been given by the Engineer In Charge. Upon failure on the part of the contractor to comply with any instruction of the Engineer-in-charge made under the provisions of this article within the time stipulated by the Engineer-in-charge, the Engineer-in-charge shall have authority to remove and replace defective material and recover the cost of removal and replacement from the contractor.

Further all such defective material lying at site not removed and replaced within 30 days after issue of notice by the Engineer-in-charge, if the Engineer-in-charge so decides, shall dispose off such material in any manner without any further written notice to the contractor.

9. Measurement and Payments

Except where any general or detailed description of the work in the Bill of Quantities or specifications of the contract/ work order provides otherwise, measurement of work done shall be taken in accordance with the relevant standard method of measurement published by the Bureau of Indian Standards(BIS) and if not covered by the above, other relevant Standards/practices shall be followed as per instructions of the Engineer In Charge.

- **9.1** All items of work carried out by the contractor in accordance with the provision of the contract having a financial value shall be entered in the Measurement Book as prescribed by the company so that a complete record of the measurements is available for all the works executed under the contract and the value of the work executed can be ascertained and determined therefrom. Measurements of completed work / portion of completed work shall be recorded only in the Measurement Books.
- **9.2** Measurement shall be taken jointly by the Engineer-in-Charge or his authorised representative and by the contractor or his authorised representative.
- **9.3** Before taking measurements of any work, the Engineer In Charge or the person deputed by him for the purpose shall intimate the contractor to attend or to send his representative to attend the measurement. Every measurement thus taken shall be signed and dated by both the parties on the site on completion of the measurement. If the contractor objects to any measurements, a note to that effect shall be made in the Measurement Book / Log Book and signed and dated by both the parties.
- **9.4** The measurement of the portion of work/items of work objected to, shall be re-measured by the Engineer In Charge himself or the authority nominated by the company for the purpose in the presence of the contractor or his authorised representative and recorded in the M.B. which shall be signed and dated by both the parties. Measurements so recorded shall be final and binding upon the contractor and no claim whatsoever shall thereafter be entertained.

In case the contractor or his authorised representative does not attend to the joint measurements at the prefixed date and time after due notice, the measurements taken by the Engineer In Charge or his representative shall be final and binding on the contractor.

Measurement of the extra items of work or excess quantities of work duly authorised in writing by the Engineer In Charge shall also be taken and recorded in the M.B. based on the existing items in the SOR of the company and if such items do not exist in the company's SOR, the description of the work shall be as per actual execution. Payment for such extra items will be based on the rates to be derived as described in the relevant clauses of the contract/ work-order

9.5 No work shall be covered up or put out of view without the approval by the Engineer In Charge and recording of measurements and check measurement thereof duly accepted by the contractor. The contractor shall provide full opportunity to the Engineer In Charge or his representative to examine and measure all works to be covered up and to examine the foundations before covering up.

The contractor shall also give notice to Engineer In Charge whenever such works or foundations are ready for examination and the Engineer In Charge shall without unreasonable delay arrange to inspect and to record the measurements, if the work is acceptable and advise the contractor regarding covering of such works or foundations.

- **9.6** In case of items which are claimed by the contractor but are not admissible according to the department, measurements of such items, will be taken by for record purposes only and without prejudice so that in case it is subsequently decided by the department to admit the contractor's claims, there should be no difficulty in determining the quantities of such work. A suitable remark should, however, be made against such measurements to guard against payment in the ordinary way.
- **9.7 Payments**: The running on account payments may be made once in a month or at intervals stipulated in the work order/ contract agreement.
- **9.7.01** Running on account bill/bills for the work executed/ materials supplied in accordance with the work order/ contract shall be prepared on the basis of detailed measurements recorded as described hereinbefore and processed for payments.

- **9.7.02** Payment of on account bill shall be made on the Engineer In Charge's certifying the sum to which the contractor is considered entitled by way of interim payment for the following:
- a) The work executed as covered by the bill/bills after deducting the amount already paid, the security deposit and such other amounts as may be deductible or recoverable in terms of the work order/ contract.
- b) (i) Payment for excess quantity of work done with the written instructions of the Engineer In Charge for items already appearing in the bill of quantities of work with approved rates, will be made alongwith the on account bills only upto 10% of the quantity provided in the agreement subject to overall value of work not exceeding the agreement value.
- (ii) The CGM(Civil)/ GM(Civil)/ CE(Civil) of the company and / or the Staff Officer(C) of the Area may authorise interim payment for excess work done upto 20 % of the quantity of work provided in the Bill of Quantity of the work awarded from Company level and Area level respectively subject to overall value of work done does not exceed the contract value.
- c) Extra items of work executed will be paid on specific written authorisation of CGM (Civil)/ GM(C)/ CE(C) of the company or Staff Officer (Civil) of the Area provided that the value of such extra items of work when added together is not more than 10% of the contract value and the total gross payment including excess quantity does not exceed the contract value.

Balance amount on account of excess quantity and extra items of work executed shall be paid after the deviation estimate / revised estimate regularising the extra items and excess quantities of work is sanctioned by the competent authority of the company with the concurrence of the Finance Department of the company.

- d) On the Engineer In Charge's certificate of completion in respect of the work covered by the contract / final measurements of the work certified by the Engineer In Charge or his representative.
- **9.7.03** The measurements shall be entered in the M.B for the work done upto the date of completion and evaluated based on the approved rates for the items in the contract agreement/sanctioned revised estimate. In case of extra items of work, the rates shall be derived as stated in the relevant clause of the contract.

The payments shall be released against the final bill subject to all deductions which may be made on account of materials supplied, water supply for construction, supply of electricity and any other dues payable by the contractor to the company, and further subject to the contractor having given to the Engineer In Charge a no claim certificate.

The contractor shall indemnify the company against proof of depositing royalty on account of minor minerals used in the work before the final bill is processed for payments. The final payment to be made will also be subject to Clause-4.5 of the General Terms & Conditions of the contract.

- **9.7.04** Any certificate given by the Engineer In Charge for the purpose of payment of interim bill/bills shall not of itself be conclusive evidence that any work/materials to which it relate is/are in accordance with the contract and may be modified or corrected by the Engineer In Charge by any subsequent certificate or by the final certificate.
- **9.7.05** The company reserve the right to recover/enforce recovery of any over payments detected after the payment as a result of post payment audit or technical examination or by any other means, not withstanding the fact that the amount of disputed claims, if any, of the contractor exceeds the amount of such overpayment and irrespective of the facts whether such disputed claims of the contractor are the subject matter of arbitration or not.

The amount of such over payments shall be recovered from subsequent bills under the contract, failing that from contractor's claim under any other contract with the company or form the contractor's security deposit or the contractor shall pay the amount of over payment on demand. In case of contractor's non-payment on such demand, the same should be realised from the contractor's dues, if any, with Coal India Limited or any of it's subsidiaries.

9.7.06 The contractors are required to execute all works satisfactorily and according to the specifications laid down in the contract/ work order. If certain items of work, executed by the contractor, are below specifications, the contractor should re-do them according to the specifications and instructions of EIC and

if the contractor fails to rectify the defect within the time and in the manner specified by the EIC, the work shall be got re-done or rectified by the department at the risk and cost of the contractor. Engineer In Charge may accept such work of below specifications provided the department is satisfied with the quality of such works and the strength/ structural safety of such works. In that case Engineer In Charge shall make such deductions for the difference in value, as in his opinion is reasonable and is approved by the accepting authority of the company i.e. CGM(C)/CE(C) of the company in this case or any other officer nominated by CGM(C)/CE(C) for the purpose.

9.7.07 Payment Stage: The payment stage involved will be as under,

- i) Signature of EA(Civil)/ Sr. Overseer(C) / Overseer(C) in MB's both in pages recording measurements, abstract of bill & the duly filled in bill form.
- ii) Signature of Engineer(C)/ EE(C) with appropriate check measurements in the MB's and the bill form.

iii) Signature of Sr. EE(C)/ SE(C) with appropriate check measurements in MB's and the bill form.

iv) Signature of Engineer in Charge as per definition as at clause 1(vii) of the General Terms and Conditions, as a token of acceptance for payment of the bill. The EIC may sign in the abstract of the bill in the MB & the bill form. In between stage iii) and iv) accountal checking may be made by the concerned Accounts Officer/ Accountant.

9.7.08 Secured Advance: Secured advance can be paid for items of materials required for execution of the work and covered under categories A & B and supplied by the contractor at work site, supported by necessary vouchers, challans, test certificates etc. after execution of indemnity bond as per prescribed Form of the company on non-judicial stamp paper of prescribed value.

This advance shall be recovered in four equal installments or as per consumption whichever is higher. Engineer In Charge shall recover at his discretion all or any part of secured advance paid, if in his opinion the work is not progressing satisfactorily or the security of these materials at site is not adequately taken care of by the contractor. Secured advance shall be payable for contracts of value above Rs.10.00 lakhs only.

Secured advance for structural steel sections, reinforcement steel and cement, collected at site, will be paid upto 75% of the corresponding stock yard prices of SAIL for the corresponding steel items and Govt. approved/ D.G.S.D. prices for cement, if the same exist.

In case of non-availability of Govt. approved prices of cement & steel and for the materials falling under Category - A and B the secured advance will be paid at the basic rate available in the approved schedule of rates of the company plus or minus the overall percentage on which the work was awarded, provided such rate is not more than 60% of the quoted rate of the contractor for the actual work.

At any point of time the outstanding recoverable secured advance shall not be more than 10% of the contract value.

Items against which secured advance can be granted:

Category-A

Civil:

- 1. Bricks
- 2. Stone and brick aggregate
- 3. Stones
- 4. Finished products of brass, iron and steel such as doors & windows frames, wire mesh, gate, GI Sheets.
- 5. Pre-cast R.C.C. products such as pipes, jali, water storage tanks etc.
- 6. Doors & Window fittings.
- 7. Pipes and sanitary fittings of CI, SCI & HCI

Electrical:

1. Steel conduits

- 2. G.I. Pipes
- 3. I.C. Boards
- 4. Switchgears (Air circuit beakers and Air break switches)
- 5. C.I. Boxes.
- 6. A.C.S.R. Conductors
- 7. A.C. Plant & Machinery
- 8. Pumps
- 9. Generating sets (without oil)

Items against which secured advance can be granted:

Category- B

Civil:

- 1. Glazed tiles, terrazzo tiles and similar articles.
- 2. Marble slabs
- 3. Asbestos cement products
- 4. Finished timber products such as doors, windows, flush doors, particle boards (subject to mandatory test being satisfactory) etc. 5. Bitumen in sealed drums
- 6. Bitumen felt
- 7. Polythene pipes and fittings and tanks
- 8. Sanitary fittings and pipes of S.W., porcelain and chinaware materials
- 9. Laminated / Šafety, one way vision, and bullet proof glasses.
- 10. Chemical required for anti-termite treatment (in sealed drums)
- 11. Paints, varnishes, distempers, pigment, spirits etc.

Electrical:

- 1. Transformers
- 2. Oil-filled switch gears.
- 3. L.T. & H.T.Cables
- 4. Fans
- 5. Storage and Dry Batteries
- 6. Insulation tapes
- 7. Epoxy cable compounds
- 8. Electric light fittings
- 9. Wooden battens, casing & capping and wooden boards
- 10.Flexible wires
- 11.PVC materials
- 12.Oil and lubricants
- 13. Rubber materials
- 14. Glass wool, thermocole & other insulating materials
- 15. Porcelain H.T. and L.T. insulators.

In addition to indemnity bond, for materials listed under Category-B, the contractor shall be required to provide necessary insurance cover of equivalent value of materials.

Items against which no secured advance shall be granted:

Civil:

- 1. Glass products other than those indicated in Category-B.
- 2. Sand and moorum
- 3. Chemical compounds other than those indicated in Category-B.

Electrical:

- 1. Glass gloves and shades
- 2. Bulbs and tubes
- 3. Petrol and diesel
- 4. Freon and other refrigeration gases.

9.8 Income tax deduction @ 2% (Two percent) of the gross value of each bill or at the rate as amended from time to time, shall be made unless exempted by the competent authority of the Income Tax Department

Sales tax on works contract shall be payable by the contractor. If, however, the company is asked to make deduction from the contractor's bills, the same shall be done and a certificate to this effect shall be issued to the contractor for dealing with the State Govt. and the company does not take any responsibility to do anything further in this regard.

9.9 No interest shall be payable on the amounts withheld, under the terms of the Contract Agreement/Work-order.

10. Termination, Cancellation, Suspension and Foreclosure of Contract

The company shall, in addition to other remedial steps to be taken as provided in the conditions of contract be entitled to cancel the contract in full or in part, if the contractor :-

a) makes default in proceeding with the works with due diligence and continues to do so even after a notice in writing from the Engineer In Charge, then on the expiry of the period as specified in the notice

Or

b) commits default/breach in complying with any of the terms and conditions of the contract and does not remedy it or fails to take effective steps for the remedy to the satisfaction of the Engineer In Charge, then on the expiry of the period as may be specified by the Engineer In Charge in a notice in writing.

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c) obtains a contract with the company as a result of ring tendering or other non-bonafide methods of competitive tendering

Or

d) shall offer or give or agree to give any person in the service of the company or to any other person on his behalf any gift or consideration of any kind as an inducement or reward for act/acts of favour in relation to the obtaining or execution of this or any other contract for his company.

e) fails to complete the work or items of work with individual dates of completion, on or before the date/dates of completion or as extended by the company, then on the expiry of the period as may be specified by the Engineer In Charge in a notice in writing.

Or

- f) transfers, sublets, assigns the entire work or any portion thereof without the prior approval in writing from the Engineer In Charge. The Engineer In Charge may by giving a written notice, cancel the whole contract or portion of it in default.
- **10.1** The contract shall also stand terminated under any of the following circumstances :
- a) If the contractor being an individual in the case of proprietary concern or in the case of a partnership firm any of its partners is declared insolvent under the provisions of Insolvency Act for the time being in force, or makes any conveyance or assignment of his effects or composition or arrangement for the benefit of his creditors amounting to proceedings for liquidation or composition under any Insolvency Act.
- b) In the case of the contractor being a company, its affairs are under liquidation either by a resolution passed by the contractors company or by an order of court, not being a voluntary liquidation proceedings for the purpose of amalgamation or reorganisation, or a receiver or manager is appointed by the court on the application by the debenture holders of the contractor's company, if any.
- c) If the contractor shall suffer an execution being levied on his/their goods, estates and allow it to be continued for a period of 21 (twenty-one) days.
- d) On the death of the contractor being a proprietary concern or of any of the partners in the case of a partnership concern and the company is not satisfied that the legal representative of the deceased proprietor or the other surviving partners of the partnership concern are capable of carrying out and completing the contract. The decision of the company in this respect shall be final and binding which is to be intimated in writing to the legal representative or to the partnership concern.
- **10.2** On cancellation of the contract or on termination of the contract, the Engineer In Charge shall have powers:
- a) to take possession of the site and any materials, constructional plant, equipments, stores etc. thereon.
 - b) to carry out the incomplete work by any means at the risk and cost of the contractor.
- c) to determine the amount to be recovered from the contractor for completing the remaining work or in the event the remaining work is not to be completed the loss/damage suffered, if any, by the company after giving credit for the value of the work executed by the contractor upto the time of cancellation less on a/c payments made till date and value of contractor's materials, plant, equipments, etc. taken possession of after cancellation.
- d) to recover the amount determined as above, if any, from any money due to the contractor on any account or under any other contract and in the event of any shortfall, the contractor shall be called upon to pay the same on demand. The need for determination of the amount of recovery of any extra cost/expenditure or of any loss/damage suffered by the company shall not however arise in the case of termination of the contract for death/demise of the contractor as stated in clause 10.1(d) of the contract.

e) to give the contractor or his representative of the work 7 (seven) days notice in writing for taking final measurement for the works executed till the date of cancellation or termination of the contract. The Engineer In Charge shall fix the time for taking such final measurement and intimate the contractor in writing. The final measurement shall be carried out at the said appointed time notwithstanding whether the contractor is present or not. Any claim as regards measurement which the contractor is to make shall be made in writing within 7 (seven) days of taking final measurement by Engineer-In-charge as aforesaid and if no such claim is received, the contractor shall be deemed to have waived all claims regarding above measurements and any claim made thereafter shall not be entertained.

10.3 Suspension of Work:

- i) The company shall have power to suspend the work or any part thereof and the Engineer In Charge may direct the contractor in writing to suspend the work, for such period and in such manner as may be specified therein, on account of any default on the part of the contractor, or for proper execution of the work for reasons other than any default on part of the contractor, or on ground of safety of the work.
- ii) In the event of suspension for reasons other than any default on the part of the contractor, extension of time shall be allowed by the company equal to the period of such suspension and the contractor shall properly protect and secure the works to the extent necessary during such suspension.

The contractor shall carry out the instructions given in this respect by the Engineer-In Charge & if such suspension exceeds 45 (forty five) days, the contractor will be compensated on mutually agreed terms.

10.4 The work shall, throughout the stipulated period of contract, be carried out with all due diligence on the part of the contractor. In the event of termination or suspension of the contract, on account of default on the part of the contractor, as narrated hereinbefore, the security deposit and other dues of this work or any other work done under this company shall be forfeited and brought under the absolute disposal of the company provided, that the amount so forfeited shall not exceed 10 (ten) percent of the contract value.

10.5 Foreclosure of contract:

If at any time after acceptance of the tender the company decides to abandon for any reason whatsoever the company, through its Engineer In Charge, shall give notice in writing to that effect to the contractor. In the event of abandonment the company shall be liable:-

- a) to pay reasonable amount assessed and certified by the Engineer In Charge of the expenditure incurred, if any, by the contractor on preliminary works at site e.g. temporary access roads, temporary construction for labour and staff quarters, office accommodation, storage of materials, water storage tanks and water supply for the work including supply to labour/ staff quarters, office etc.
- b) to pay the contractor at the contract rates full amount for works executed and measured at site upto the date of such abandonment.
- c) to pay for the materials brought to site or to be delivered at site, which the contractor is legally liable to pay, for the purpose of consumption in works carried out or were to be carried out but for the foreclosure, including the cost of purchase and transportation and cost of delivery of such materials. The materials to be taken over by the company should be in good condition and the company may allow at its discretion the contractor to retain the materials in full or in part if so desired by him and to be transported by the contractor from site to his place at his own cost with due permission of the EIC.
- d) to take back the materials issued by the company but remaining unused, if any, in the work on the date of abandonment/reduction in the work, at the original issue price less allowance for any deterioration or damage caused while in custody of the contractor.
- e) to pay for the transportation of tools and plants of the contractor from site to contractor's place or to any other destination, whichever is less.
- **10.5.01** The contractor shall, if required by the Engineer In Charge, furnish to him books of accounts, papers, relevant documents as may be necessary to enable the Engineer In Charge to assess the amounts

payable in terms of clauses10.5(b) (c) & (e) of the contract. The contractor shall not have any claim for compensation for abandonment of the work, other than those as specified above.

11. Completion Certificate / Defect Liability Certificate

Except in cases where the contract provides for "Performance Test" before issue of Defect Liability certificate, in which case the issue of Defect Liability certificate shall be in accordance with the procedure specified therein, the contractor shall give notice of completion of work, as soon as the work is completed, to the Engineer In Charge. The Engineer In Charge and or any other Officer, nominated for the purpose by the company, shall within 30 (thirty) days from the receipt thereof, inspect the work and ascertain the defects/deficiencies, if any, to be rectified by the contractor as also the items, if any, for which payment shall be made at reduced rate.

If the defects, according to the Engineer In Charge are of a major nature and the rectification of which is necessary for the satisfactory performance of the contract, he shall intimate in writing the defects and instruct the contractor to rectify the defects/remove deficiencies within the period and in the manner to be specified therein. In such cases Defect Liability Certificate will be issued by the EIC after the above rectifications are carried out/ deficiencies are removed by the contractor to the satisfaction of EIC.

In the event there are no defects or the defects/ deficiencies are of a minor nature and the Engineer In Charge is satisfied that the contractor has already made arrangements for rectification, or in the event of contractor's failure to rectify the defects for any reason whatsoever, the defects can be rectified by the company departmentally or by other means and the 50% of the security deposit of the contractor shall be sufficient to cover the cost thereof, he shall issue the Defect Liability Certificate (Taking Over Certificate with list of defects)indicating the date of completion of the work, defects to be rectified, if any, and the items, if any, for which payment shall be made at reduced rate indicating reasons therefor and with necessary instructions to the contractor to clear the site/place of work or all debris/ waste materials, scaffoldings, sheds, surplus materials etc. making it clean.

11.1 In cases where separate period of completion for certain items or groups of items are specified in the contract, separate Defect Liability certificate for such items or groups of items may be issued by the Engineer In Charge after completion of such items on receipt of notice from the contractor only in the event the work is completed satisfactorily in every respect.

Refund of security deposit and payment of final bill shall, however, be made on completion of the entire contract work, but not on completion of such items of work.

12. Additional Responsibilities of the Contractor(s)

The cost on account of the "Additional Responsibilities of the Contractors" under this clause is deemed to be included in the tendered rates.

- i) The company reserves the right to let other contractors also works in connection with the Project and the contractor/contractors shall co-operate in the works for the introduction and stores and materials and execution of his/their works.
- ii) The contractor/contractors shall keep on the work site during the progress a competent and experienced Resident Engineer exclusively for the work and necessary assistants who shall represent the contractor(s). The contractor shall employ, on the site in connection with the execution and maintenance of the work, the following technical staff:

For Buildings Roads, Water Supply & Sanitary Works:

- 1) For value of work ranging from Rs.10 lakhs to Rs.20 lakhs.
- 2) For value of work above Rs.20 lakhs and upto Rs.1 crore.
- For value of work in excess of Rs.1 crore & for every additional Rs.2 crores or part thereof
- 4) For value of work in excess of Rs.20
- 1 Experienced Diploma holder.
- 1 Experienced Graduate Engineer in addition to Diploma holder as per sl.no.4 below.
- 1 Graduate Engineer extra in addition to Graduate Engineer and Diploma holder as per sl.no.1 & 4.
- 1 Diploma holder extra.

lakhs & for every additional Rs.50 lakhs or part thereof.

For Industrial Structures:

- 1) For value of work ranging from Rs.5 lakhs to Rs.15 lakhs.
- 2) For value of work above Rs.15 lakhs and upto Rs.75 lakhs.
- For value of work in excess of Rs.75 lakhs & for every additional Rs.1.5 crores or part thereof.
- 4) For value of work in excess of Rs.15 lakhs & for every additional Rs.50 lakhs or part thereof.
- 1 Experienced Diploma holder.
- 1 Experienced Graduate Engineer in addition to Diploma holder as per sl.no.4 below.
- 1 Graduate Engineer extra in addition to Graduate Engineer and Diploma holder as per sl.no.1 & 4.
- 1 Diploma holder extra.

The contractor shall intimate the Engineer In Charge in writing the names, qualifications, experience and full postal address of each and every technical personnel employed at site by him.

The contractor(s) shall not be allowed to execute the work unless he/they engage the required technical staff at site as stated above. The delay on this account, if any, shall be the contractor's responsibility.

Important instructions shall be confirmed to the contractor(s) in writing. If the contractor/contractors in course of the works finds/find any discrepancy between the drawing, forming part of the contract documents and the physical conditions of the locality or any errors or omissions in drawings except those prepared by himself / themselves and not approved by the Engineer In Charge. It shall be his/their duty to immediately inform the Engineer In Charge in writing and the Engineer In Charge shall verify the same. Any work done after such discovery and without intimation as indicated above will be done at the risk of the contractor/contractors.

iii) The contractor / contractors shall employ only competent, skillful and orderly men to do the work. The Engineer In Charge shall have the right to ask the contractor/ contractors to remove from the work site any men of the contractor/contractors who in his opinion is undesirable and the contractor/contractors will have to remove him within 3 (three) hours of such orders.

The contractor shall employ apprentices in the execution of the contract work as required under Apprentices Act.

The contractor shall further be responsible for making arrangements at his own cost, or accommodation and social needs of the staff and workers under his employment.

iv) Precautions shall be exercised at all times by the contractor(s) for the protection of persons (including employees) and property. The safety required or recommended by all applicable laws, codes, statutes and regulations shall be observed by the contractor(s). In case of accidents, the contractor(s) shall be responsible for compliance with all the requirements imposed by the Workmen's Compensation Act or any other similar laws in force, and the contractor(s) shall indemnify the company against any claim on this account.

All scaffoldings, ladders and such other structures which the workmen are likely to use shall be examined by the Engineer In Charge or his authorised representative whenever they want and the structure must be strong, durable, and safe and of such design as required by Engineer In Charge.

In no case any structure condemned by the Engineer In Charge or his authorised representatives shall be kept on the work and such structure must be pulled down within three hours of such condemnation and any certificate or instructions, however, shall in no way absolve the contractor/contractors from his/their responsibility, as an employer, as the company shall in no way be responsible for any claim.

The contractor / contractors shall at all times exercises reasonable precautions for the safety of employees in the performance of his/their contract and shall comply with all applicable provisions of the safety laws drawn up by the State Govt. or Central Govt. or Municipalities and other authorities in India. The contractor/contractors shall comply with the provision of the safety hand book as approved and amended from time to time by the Government of India.

- v) The contractor / contractors shall familiarise themselves with and be governed by all laws and rules of India and Local statutes and orders and regulations applicable to his/ their work.
- vi) The contractor shall maintain all records as per the provision made in the various statutes including Contract Labour (Regulation & Abolition) Act, 1970 and the Contract Labour (Regulation & Abolition) Central Rules,1971, Minimum Wages Act, Workmen Compensation Act etc. and latest amendment thereof. Such records maintained by the contractor shall be opened for inspection by the Engineer In Charge or by the nominated representative of the Principal Employer.
- vii) The contractor/ contractors shall provide facilities for the sanitary necessities of all persons employed on the work shall be constructed and maintained in the number, manner and place approved or ordered by the Engineer In Charge. The contractor/contractors shall vigorously prohibit committing of nuisance at any other place. Cost of all works under this item shall be covered by the contractor/contractor's tendered rates.
- viii) The contractor/contractors shall furnish to the Engineer In Charge or his authorised representative with work reports from time to time regarding the contractor / contractors organisation and the progress made by him / them in the execution of the work as per the contract.
- ix) All taxes, whether Local, Municipal, Provincial or Central etc. and cess, royalties etc. are payable or may become payable during the entire periods of contract, shall be to the contractor/contractors account and shall be deemed to have been included in the tender for the work to be executed by him/them.

However, in the event of any changes in the Sales Tax on Works Contract as required by the Statutory Authority during the contract period, necessary adjustments will be made in contractual payments. For this purpose, the base date shall be the date on which the price bids/revised price bids have been opened.

Amount payable/repayable for any subsequent change in the Sales Tax on Works Contract will be made to /from the contractors after departmental verification of such changes of tax law issued by the statutory authority.

In case the company land is used for manufacture of bricks or extraction of gravels etc. the contractor will have to pay compensation to the company (apart from the liability of the contractor to make the payment of royalty etc. to the State Government) at the same rates or royalty fixed by the State Government or an appropriate deduction may be made in the rate to be paid to the contractors.

- x) The contractor / contractors shall make his / their own arrangement for all materials, tools, staff and labourer required for the contract, which shall include cost of lead, lift, loading, unloading, railway freight, recruiting expenses and any other charges for the completion of the work to entire satisfaction of the company.
- xi) The contractor / contractors shall make their own arrangement for carriage of all materials to the work site at his/their own cost.
- xii) The work shall not be sublet to any other party, unless approved by Engineer In Charge, in writing.
- xiii) a) No fruit trees or valuable plants or trees with trunk diameter exceeding 150mm shall be pulled, destroyed or damaged by the contractor/contractors or any of his/their employees without the prior permission of the company, failing which the cost of such trees or plants shall be deducted from the contractor/contractors dues at the rate to be decided by the company. The rates quoted are supposed to include clearance of shrubs and jungles and removal of such trees upto 150 mm dia., as will be permitted by the Engineer In Charge in writing.
- b) Anything of historical or other interest or of significant value unexpectedly discovered on the site is the property of the employer. The Contractor is to notify the Nodal Officer or his nominee of such discoveries and carry out the Nodal Officer or his nominee's instructions for dealing with him.
- xiv) The contractor / contractors shall not pay less than the minimum wages to the labourers engaged by him/them as per Minimum Wages Act or such other legislation or award of the minimum wage fixed by the respective State Govt. or Central Govt. as may be in force.

- xv) All accounts shall be maintained properly and the company shall have the right of access and inspection of all such books of accounts etc., relating to payment of labourer considered necessary and the company may arrange for witnessing the payment to the labourer by its representatives.
- xvi) The contractor shall in additions to any indemnity provided by the relevant clauses of the agreement or by law, indemnify and keep indemnified for the following:
- a) The company or any agent or employee of the company against any action, claim or proceeding relating to infringement or use of any patent or design right and shall pay any royalties or other charges which may be payable in respect of any article or material included in the contract.

However, the amount so paid shall be reimbursed by the company in the event such infringement has taken place in complying with the specific directions issued by the company or the use of such article or material was the result of any drawing and/or specifications issued by the company after submission of tender by the contractor. The contractor must notify immediately after any claim being made or any action brought against the company, or any agent or employee of company in respect of any such matter.

- b) The company against all claims, damages or compensation under the provisions of payment of Wages Act, 1938, Minimum Wages Act, 1948, Employer's Liability Act, 1938, The Workmen's Compensation Act, 1923, Industrial Dispute Act, 1947, Mines Act as applicable, Employees State Insurance Act 1948 and Maternity Benefit Act, 1961, Acts regulating P.F.or any modification thereof or any other law relating thereto and rules made thereunder from time to time, as may be applicable to the contract which may arise out of or in consequence of the construction or maintenance or performance of the work under the contract and also against costs, charges and expenses of any suit, action or proceedings arising out of any accident or injury.
- c) The company against all losses and claims for injuries or damages to any third party or to any property belonging to any third party which may arise out of or in consequence of the construction or maintenance or performance of the work under the contract and against all claims/demands proceedings/damages, cost charges and expenses whatsoever in respect of or in relation thereto.
- xvii) The contractor is under obligation to hand over to the company the vacant possession of the completed building structures failing which the Engineer In Charge can impose a levy upon the contractor upto 5% of the total contract value for the delay in handing over the vacant possession of the completed works after giving a 15 (fifteen) days notice to the contractor.
- xviii) a) INSURANCE: The contractor shall take full responsibility to take all precautions to prevent loss or damage to the works or part thereof for any reasons whatsoever (excluding act of God e.g. flood, riots, war, earthquake, etc.) and shall at his own cost repair and make good the loss/damage to the work so that on completion, the work shall be in good order and condition and in conformity with the requirements of the contract and instructions of the Engineer In Charge.

In case of construction works without limiting the obligations and responsibilities under the contract, the contractor shall take insurance policy for the total value of work for the period from commencement to completion including defect liability period against risk of loss/ damage to the extent as permissible under the law of insurance.

The contractor shall arrange necessary insurance and pledge the same in the name of the company and all moneys payable by the insurers shall be recovered by the company which shall be paid to the contractor in installments as may be certified by the Engineer In Charge for the purpose of rebuilding or replacement or repair of the works and/or goods destroyed or damaged for which payment was received from the insurers.

- b) Where any company building or part thereof is used, rented or leased by the contractor for the purpose of storing or using materials of combustible nature, the contractor shall take separate insurance policy for the entire building and the policy shall be deposited with the company.
- c) The contractor shall at all times during the tenure of the contract indemnify the company against all claims, damages or compensation under the provision of the Workmen's Compensation Act and shall take insurance policy covering all risk, claims, damages, or compensation payable under the Workmen's Compensation Act or under any other law relating thereto.

- d) The contractor shall ensure that the insurance policy/ policies is/are kept alive till full expiry of the contract by timely payment of premiums and it/they shall not be cancelled without the approval of the company and a provision is made to this effect in all policies, and similar insurance policies are also taken by his sub-contractors if any. The cost of premium shall be borne by the contractor and it shall be deemed to have been included in the tendered rate.
- e) In the event of contractor's failure to effect or to keep in force the insurance referred to above or any other insurance which the contractor is required to effect under the terms of the contract, the company may effect and keep in force any such insurance and pay such premium/premiums as may be necessary for that purpose from time to time and recover the amount thus paid from any moneys due to the contractor.

THE CLAUSE 12 xviii SHALL BE APPLICABLE FOR WORKS OF ESTIMATED VALUE OF OVER Rs. 50 LAKHS.

xix) **Setting Out:** The contractor shall be responsible for the contract and proper setting out of the works and correctness of the position, reduced levels, dimensions and alignment of all parts of the work including marking out the correct lay out in reference to the permanent bench mark and reference points. Only one permanent bench mark and basic reference lines shall be marked and shown to the contractor as basic data.

The contractor shall have all necessary instruments, appliances and labour in connection therewith. If at any time during the progress of work any error is detected in respect of the position, levels, dimensions or alignment of any part of the work, the contractor on being required to do so by the Engineer In Charge or his representative shall at the expenses of the contractor rectify such errors to the satisfaction of Engineer In Charge unless such error is due to incorrect data supplied by the Engineer In Charge.

- xx) On receipt of Letter of Acceptance of Tender / Work Order the contractor shall forthwith Register and obtain License from the competent authority under the Contract Labour (Regulation & Abolition)Act 1970,the Contract Labour (Regulation & Abolition) Central Rules, 1971 and submit certified copies of the same to the Engineer In Charge and the Principal Employer.
- xxi) The contractor shall be registered with the concerned State Govt. and the Central Govt. in respect of Sales Tax Act and the certificate having details of Registration No., period of validity etc. should be submitted to the Engineer In Charge.
- xxii) The contractor shall, in connection with works, provide and maintain, at his own cost, all lights, security guards, fencing when and where necessary as required by the Engineer In Charge for the purpose of protection of the works, materials at site, safety of workmen and convenience of the public.
- xxiii) All materials (e.g. stone, moorum and other materials) obtained in the course of execution of the work during excavation and dismantling etc. shall be the property of the company and the same may be issued to the contractors, if required for use in the works at the rates to be fixed by the Engineer In Charge.
- xxiv) Unless otherwise specifically provided for, dewatering of excavation pits, working areas etc. shall be the contractor's responsibility and is to be carried out at his own cost as per instructions of EIC. The rates quoted by the contractor shall be deemed to include the dewatering costs.
- xxv) Approval by the Nodal Officer/Engineer in Charge or his nominee: The contractor shall submit specifications and drawings showing the proposed temporary work to the Nodal Officer/Engineer-in-Charge or his nominee, who is to approve them if they comply with the specifications and drawings.

The contractor shall be responsible for design of Temporary Works.

The Nodal Officer/Engineer-in-charge or his nominee's approval shall not alter the contractor's responsibility for design of the Temporary Works.

13. Defects Liability Period:

In addition to the defect/s to be rectified by the contractor as per terms of the contract/ work order, the contractor shall be responsible to make good and remedy at his own expense the defect/s mentioned hereunder within such period as may be stipulated by the Engineer In Charge in writing:

- a) Any defect/defects in the work detected by the Engineer In Charge within a period of 6 (six) months from the date of issue of Defect Liability certificate / completion certificate.
- b) In the case of building works or other works of similar nature any defect in the work detected by the Engineer In Charge within a period of 6 (six) months from the date of issue of Defect Liability certificate/ completion certificate or before the expiry of one full monsoon period i.e. June to October whichever is later in point of time.
- 13.1 A programme shall be drawn by the contractor and the Engineer In Charge for carrying out the defects by the contractor detected within the defect liability period and if the contractor fails to adhere to this programme, the Engineer In Charge shall be at liberty to procure proper materials and carry out the rectifications in any manner considered advisable under the circumstances and the cost of such procurement of materials and rectification work shall be chargeable to the contractor and recoverable from any of the pending dues of the contractors.

The defect liability period can be extended by the company on getting request from the contractor only for valid reasons.

There will be no defect liability period for works like Grass Cutting, Jungle Cutting, Surface Dressing & any other work of similar nature to be decided by the Engineer in Charge.

14. Operating and Maintenance Manual:

If "as built" drawings and/or Operating and Maintenance Manual are required the contractor shall supply them by the dates as per instruction of the Engineer-in-charge.

If the contractor does not supply the drawings and/or Manual by the dates as stated above, or they do not receive the Nodal Officer or his nominee's approval, the Nodal Officer or his nominee shall withhold the amount as stated in the agreement.

15. Settlement of Disputes/ Arbitration

15.1 It is incumbent upon the contractor to avoid litigation and disputes during the course of execution. However, if such disputes take place between the contractor and the department, effort shall be made first to settle the disputes at the company level.

The contractor should make request in writing to the Engineer-in-charge for settlement of such disputes/ claims within 30 (thirty) days of arising of the cause of dispute/ claim failing which no disputes/ claims of the contractor shall be entertained by the company.

15.2 If differences still persist, the settlement of the dispute with Govt. Agencies shall be dealt with as per the Guidelines issued by the Ministry of Finance, Govt. of India in this regard. In case of parties other than Govt. Agencies, the redressal of the dispute may be sought in the Court of Law.

ADDITIONAL TERMS AND CONDITIONS

The following additional terms and conditions are also acceptable to the company. The tenderers are requested not to quote any further additional conditions in the tender.

1. Mobilisation Advance

- i) No mobilisation advance is payable for works whose estimated value is less than Rs.100.00 lakhs.
- ii) In the case of turn key work whose estimated value is more than Rs.100 lakhs a maximum of 10 % of the total contract value of work will be paid as mobilisation advance subject to submission of Bank Guarantee for equal amount.
- iii) In case of other civil works valued more than Rs.100 lakhs mobilisation advance will be paid upto 5% of the contract value subject to submission of Bank Guarantee for equal amount.
- iv) However, such mobilisation advance will carry interest on the basis of CIL's borrowing rate under cash credit arrangement as varying from time to time.
- v) The mobilisation advance shall be recovered from the bills of the contractor from the 2nd running account bill onwards @ 20% of the advance amount paid and full recovery would be ensured before or with the Final Bill.
- vi) The value of Bank Guarantee may be reduced to the extent such advance is recovered by the company subject to the conditions that the value of Bank Guarantee amount at any time is more than the recoverable outstanding advance. Bank Guarantee shall be irrevocable and from a Bank as per the list provided with the document.

2. <u>Application of Price Variation Cause.</u>

If the prices of materials (not being the materials supplied at fixed issue rates by the company) and wages of labour required for execution of the work <u>increase or decrease</u>, the contractor shall be compensated for such increase or recoveries will be made from the bills for such decrease as per provisions detailed hereafter:

- a) The amount of the contract shall accordingly be varied subject to the condition that such compensation for escalation/ de-escalation in price shall be available only for the work done during the stipulated period of the contract including such period for which the contract is validily extended under the provisions of the contract without any penal action. The Price Variation Clause shall not be applicable for works for which stipulated period of completion is six months or less.
- b) The base date for working out such escalation/de-escalation shall be the last date on which the price bids or revised price bids were stipulated to be received.
- c) The compensation for escalation or recoveries to be made shall be worked out at quarterly intervals and shall be with respect to the cost of work done during the previous three months. The first such payment will be made at the end of three months after the month (excluding) in which the tender was accepted and there after at three months' interval.
- **2.1 Escalation/ De-escalation for Labour:** The amount paid to the contractor for the work done shall be adjusted for increase or decrease in the cost of labour and the cost shall be calculated quarterly in accordance with the following formula:

Where:

- VL= Variation in labour cost i.e., increase or decrease in the amount in rupees to be paid or recovered.
- W = Value of work done during the period under reckoning to which the escalation/deescalation relates as indicated in clause-2.4 of the Additional Terms & Conditions of the contract.
- A = Component of labour expressed as percentage of the total value of the work adopted from the Table-1.
- Lo = Minimum wages for unskilled workers payable as per the Minimum Wages Act / Rules of the State or Central Govt., whichever is more, applicable to the place of work as on the last date stipulated for receipt of the price bids or revised price bids whichever is later.
 - L = Revised minimum wages of unskilled worker corresponding to Lo during the period to which the escalation/de-escalation relates.
- **2.2 Escalation /De-escalation on Materials:** The amount to be paid to the contractor for the work done will be adjusted for increase or decrease in the cost of materials and the cost shall be calculated quarterly in accordance with the following formula:

Where:

- Vm = Variation in the material cost i.e. increase or decrease in the amount in rupees to be paid or recovered.
- W = Cost of work done during the period under reckoning to which the escalation / de-escalation relates as indicated in clause-2.4 of the Additional Terms & Conditions of the contract.
- B = Component of material expressed as percentage of the total value of the work adopted from the Table -1.
- M = Average All India Wholesale Price Index for all commodities for the period to which escalation/de-escalation relates as published by the RBI Bulletin, Ministry of Industry & Commerce, Govt. of India.
- Mo = All India Wholesale Price Index for all commodities as published by the RBI Bulletin, Ministry of Industry & Commerce, Govt. of India, relating to the last date on which the price bids or revised price bids whichever is later were stipulated to be received.
- **2.3 Escalation/ De-escalation on POL**: The amount to be paid to the contractor for the work done shall be adjusted for the increase or decrease in the cost of POL and the cost shall be calculated quarterly in accordance with the formula given below:

Where:

Vf = Variation in the cost of fuel, oil and lubricants increase or decrease in the rupees to be paid or recovered.

- W = Value of work done during the period under reckoning to which the escalation/ de-escalation relates as indicated in clause 2.4 of the Additional terms & Conditions of the contract.
- C = Component of POL expressed as percentage of the total cost of the work taken from Table -
- F = Average Index Number for wholesale price for the group of 'Fuel, Power, Light & Lubricants' as published by the Economic Adviser, Ministry of Industry, Govt. of India for the period to which the escalation/de-escalation relates.
- Fo = Index number of wholesale price for the group, Fuel, Power, light & lubricants as published by the Economic Adviser, Ministry of Industry, Govt. of India prevalent on the last date of receipt of price bids or revised price bids whichever is later.
- **2.4 While calculating the value of "W" the following may be noted**: The cost on which the escalation will be payable shall be reckoned as 85 % of the cost of work as per the bills to which escalation relates, and from this amount the value of materials supplied or services rendered at the prescribed charges under the relevant provisions of the contract, and proposed to be recovered in the particular bill, shall be deducted before the amount of compensation for escalation or de-escalation is worked out. In the case of materials brought to site for which any secured advance is included in the bill, the full value of such materials as assessed by the Engineer In Charge (and not the reduced amount for which secured advance has been paid) shall be included in the cost of work done for operation of this clause. Similarly, when such materials are incorporated in the work and the secured advance is deducted from the bill, the full assessed value of the materials originally considered for operation of this clause should be deducted from the cost of the work shown in the bill, running or final. Further the cost of work shall not include any work for which payment is made at prevailing market rates.
- 2.5 In the event the price of materials and/ or wages of labour required for execution of the work decreases, there shall be downward adjustment of the cost of work so that such price of materials and/or wages of labour shall be deductible from the cost of work under this contract and in this regard the formulae herein before stated under this clause shall mutatis/mutandis apply provided that no such adjustment for the decrease in material price and/ or wages of labour before mentioned would be made in case of contracts in which the stipulated period of completion of the work is less than six (6) months.

2.6 Application of Price Variation Clause during extended period of Contracts.

The Price Variation Clause as stated above will be applied for extended time frame of a contract by following the principle stated as under,

- i) Normally, if and when it is understood that a contract is not going to be completed within the scheduled time period, the contract is kept operative by extending the time of completion provisionally. During this provisional extended period the operation of the Price Variation Clause will remain suspended.
- ii) If and when it is decided at the end of successful completion of the work that the delay was due to causes NOT attributable to the Contractor, then the Price Variation Clause will be revived and applied as if the scheduled date of completion has been shifted to the approved extended date.
- iii) If it is decided at the end of completion of the work that the delay was due to the fault of the Contractor, then the Price Variation Clause will not be revived and NO PAYMENT will be made to the Contractor on this account. Additionally the Clause related to Compensation for Delay will be applied.

The payment will be made by applying Thezelf indicate any chedinotanees.			
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Table - 1

Value of A, B & C in the escalation formula in the additional terms & conditions for Civil Works :

SI. Particulars No.	A % (Labour component)	B % (Material component)	C % (POL component)	REMARKS
1. For building works	25	75	Nil	
2. For Road works	15	80	05	
For external sewerage, external water supply, and external electri- fication	10	90	Nil	
4. For external water supply,external sanitary and external electrification (through labourrate contract)	75 t)	25	Nil	
5. For steel structural works	s 15	85	Nil	
6. For steel structural works with Deptt. free supply of rolled steel sections (through labour rate contract)	75	25	Nil	
7. For Coal Handling Plant Civil Works	25	75	Nil	
For under-ground civil works such as Incline Drivage, Shaft Sinking etc.	35	65	Nil	

For all other works not listed above, the component of labour, material and POL of the total cost of work shall be as specifically indicated in the tender document.

ADDITIONAL SAFETY MEASURES TO BE TAKEN BY THE CONTRACTORS

SAFETY CODE

- 1. Suitable scaffolds should be provided for workmen for all works that cannot safety be done form the ground or from solid construction except such short period work as can be done safety from ladder. When a ladder is used an extra Mazdoor shall be engaged for holding the ladder and if the ladder is used for carrying materials as well, suitable foot holds and handholds shall be provided on the ladder and the ladder shall be given on the inclination not steeper that 1/4 to 1 (1/4 horizontal and 1 vertical).
 - a. Scaffolding or staging more than 12' above the ground or floor, swing or suspended, from an overhead support to created with stationery support shall have a guard rail properly attached, bolted, braced and otherwise accused atleast 3 feet high above the floor or platform of such scaffolding or staging and ends thereof with only such openings as maybe necessary for the delivery of materials. Such scaffoldings or staging shall be so fastened as to prevent it from swaying from the building or structure.
 - b. Working platform, gangways and stairways should be so constructed that they should not sag unduly or unequally and if the height of the platform or the gangway or the stairway is more than 12 feet above ground level or floor level they should be closely boarded, should have adequate width and should be suitably fenced, as described in (ii) above.
 - c. Every opening in the floor of a building or in working platform be provided with suitable means to prevent the fall or persons or materials by providing suitable fencing or railing whose minimum height shall be 3' 0'.
 - Safe means of access shall be provided to all working platforms and other working places. Every ladder shall be provided securely fixed. No portable single ladder shall be over 30 feet in length while the width between side rails in rung ladder shall in no case be less than 11 - 1/2 " for ladder upto and including 10 feet in length. For longer ladders this width should be increased atleast 1/4% for each additional feet of length. Uniform step spacing shall not exceed 12". Adequate precautions shall be taken to prevent danger from electrical equipment. No materials on any of the sites of work shall be so stacked or placed as to cause danger or inconvenience to any person or the public. The contractor / contractors shall also provide all necessary fencing and lights to protect the public from accident and shall be bound to bear the expenses of defence of every suit action or other proceedings at all that may brought by any person for injury sustained owing to neglect of the above precautions and to pay any damages and cost which may be awarded in any such suit, action of proceedings to any such person or which may with the consent of the contractor (s) be paid to compromise any claim by any such persons.

Excavating and Trenching

e. All trends, feet or more in depth, shall at all times be supplied with at least one ladder for each 100 feet in length or fraction thereof. Ladder shall be extended from bottom of the trench to at least 3' above the surface of the ground. The side of the branches which are 5' or more in depth shall be stepped back to give suitable slope or securely held by timber bracing, so as to avoid the danger of sides to collapse. The excavated materials shall not be place within 5 feet of the edge of

the trench or half of the trench which ever is more cutting shall be done form top to bottom. Under no circumstances under mining or under cutting shall be done.

Demolition

- f. Before any demolition work is commenced and also during the process of the work
 - a. All roads and open areas adjacent to the work site shall either be closed or suitable protected.
 - b. No electric cable "or apparatus which is liable to be a source of danger over a cable or apparatus used by the operation shall remain electrically charge.
 - c.All practical steps shall be taken to prevent danger to persons employed from risk of fire or explosion or flooding. No floor, roof or other part of the building shall be so overloaded with debris or materials as to render it unsafe.
- g. All necessary personal safety equipment as considered adequate by the Engineer-in-Charge should be kept available for the use of the persons employed on the site and maintained in a condition suitable for immediate use and the contractor should take adequate steps to ensure proper use of equipment by those concerned.
 - a. Workers employed on mixing as fighting materials, cement and lime mortar shall be provided with protective foot ware and protective goggles.
 - b. Those engaged in white washing and mixing or stacking of cement bags or ay materials which is injurious to the eyes shall be provided with protective goggles.
 - c. Those engaged in welding works shall be provided with welders glass.
 - d. Stone breakers shall be provided with protective goggles and protective clothing and seated at sulfurously safe intervals.
 - e. When workers are employed in sewers and manholes, which are in use, the contractor(s) shall ensure that the mobile covers are opened and are ventilated at least for an hour before the workers are allowed to get into the manholes and the holes so opened shall be cerdoned off with suitable for ling and provided with warning signals or boards to prevent accident to the public.
 - f. The contractor(s) shall not employ men below the age of 18 and woman on the work of painting with products containing lead in any form. Whenever man above the age of 18 are employed for the work of lead painting the following precautions should be taken:
 - 1. No paint containing lead or lead products should be used except in the form or paste and ready-made paint.
 - Suitable face masks should be supplied for use by the workers when paint is applied in the form of spray or a surface having lead paint dry rubber and scraped.
 - 3. Overalls shall be supplied by the Contractor(s) to the workmen and adequate facilities shall be provided to enable the working psinyrtd to wash during process of work.
- ix. When the work is done near any place where there is risk or drawing all necessary equipments should be provided and kept ready. Prompt rescue of any person in danger adequate provision should be made or prompt first aid treatment of all injuries likely to be sustained during the course of the work.
- x. Use of hoisting machines and tackle including their attachments, uncharged and supported shall conform to the following stands or conditions:
 - 1.a These shall be of good mechanical construction sound materials and adequate strength and free from patent defect and shall be kept in good repair and in good working order.

- b. Every rope used in jointing or lowering materials or as a means of suspension shall be of durable quality and adequate strength, and free from patent defects.
- 2. Every crane driver or jointing appliance operator shall be properly qualified and no person under the age of 21 years should be In-charge of any hoisting machine including any scaffold, which or give samples to the operator.
- 3. In case of every joisting machine and of every chain ring hook, shackle swizzle and pulley block used in jointing or lowering or as means mains of suspension of the safe working load shall be ascertained by adequate means. Every hosting machine and all gear referred to above shall be plainly marked with the safe working load. In case of joisting machine having variable safe working load each safe working load of the condition under which it is applicable shall be clearly indicated. No part of any machine or any gear referred to above in this paragraph shall be beyond the safe working load except for the purpose of testing.
- 4. In case of department machines, the safe working load shall be notice by the Electrical Engineer-in-Charge. As regards contractor's machines the contractor(s) shall notify the safe working load of the machines to the Engineer-in-Charge. Whenever he brings any machine to site of work and get verified by the Electrical Engineer concerned.
- xi. Gearing, transmission, electric wiring and other dangerous parts or hoisting appliances should be provide with such means as will reduce to minimum risk of accidental descent of the load. Adequate precaution should be taken to reduce to the minimum the risk of any part of suspended load becoming accidentally displaced.

When workers employed on electrical installations, which are already energized, insulating mats, wearing appeared, such as Globefish Sleeves and boots as may be necessary should be provided. The workers should not wear any rings, watches and carry keys or others materials which are good conductors of electricity.

- xii. All scaffold, ladders and other safety devices mentioned or described herein shall be maintained in safe condition and no scaffold, ladder or equipment shall be altered or removed while it is in use. Adequate washing facilities shall provided at or near places of work.
- xiii. These safety provision, shall be brought to the notice of all concerned by display on a Notice Board at a prominent place at the work spot. The person responsible by for complaisance of the safety code shall be named therein by the contractor(s).
- xiv. To ensure effective enforcement of the rules, regulations relating to safety precautions, the arrangements made by the contractor(s) shall be open to inspection by the labour officers, Engineer-in-Charge of the department or their representative.
- xv. Not with standing the above clause from (1) to (xiv) there is nothing in these to exempt the contractor9s) from the operations of any other act or rules inforce in the Republic of India.

Read over & accepted Signature of the Contractor

DECLARATION BY THE CONTACTOR

1.	I / We
	Contractor, hereby undertake that I / We shall pay the labour engaged on the work of
	accordingly. I/We also undertake to abide by the various laws in force and extend necessary facilities and amenities to the staff and workers employed by me / us.

- 2. I / We hereby declare that I / We have made myself / ourselves thoroughly conversant with the local conditions regarding all materials and labour on which I / We have based my / our rates for this work. The specification / conditions of this work has been carefully studied and understood by me / us before submitting this tender.
- 3. I / We hereby promise to get ourselves registered with the labour department as per provision of the laws before commencement of the work.
- 4. I / We hereby declare that I / We have not even been black listed / debarred from taking work by CCL or any subsidiary of CIL.

Signature of Tenderer.

:: GENERAL SPECIFICATION ::

1. The following CPWD specifications shall be applicable for this work as per details given below: -

1.	Volume One	General carriage of materials & Earth Work
2.	Volume Two	Mortars, concrete, Reinforced cement concrete
		work, Brickwork, Stone work and Marble work.
3.	Volume Three	Wood work, Steel-work and flooring
4.	Volume Four	Roofing, Finishing, Repairs to Buildings
		,Distempering and Miscellaneous works
5.	Volume Five	Horticulture and Land scaping (excluding Road
		work)
6.	Volume Six	Sanitary installations, Water Supply, Drainage and
		Miscellaneous works.
7.	Addendum to Volume	Reinforced cement concrete work
	Two Chapter Five	

- 2. The detailed specifications are available in the market on sale. The copy of same is also available in the office of Chief General Manager (Civil), CCL, Ranchi / Staff Officer (Civil) for reference.
- 3. Central Public Works Deptt. (CPWD) Specifications are applicable for Electrical Works.
- 4 MORT&H Specifications are applicable for Road Works.

LIST OF BIS CODES TO BE FOLLOWED

CARRIAGE OF MATERIALS :

4082-1967 Recommendations of on stacking & storage of construction material at sites.

EARTH WORK:

Method of measurement of earth work. Safety code for Blasting and related drilling operations. Antitermite measures in building (Pt. I to III)

MORTAR:

Atmospheric condtions for testing.

Ordinary, rapid hardening and lo wheat protland cement (33 grade).

Coarse and fine aggregate dfrom natural source for concrete.

205-1992 Portland slag cement.

Specification for test sleves.

Standard sand for testing of cement.

205-1992 Building limes.

205-1992 Potland pozzolana cement.

205-1992 Sand for plaster.

205-1992 Methods of tests for pozzola-nic materials.

Sand for masonary mortar.

205-1992 Preparation and use of masonry mortar.

205-1992 Methods of test for aggregates for concrete.

2386 (Pt.I) particle size and shape.

2386 (Pt.II) Estimation of deleterious materials and origanic impurities.

2386(Pt.III) Specific gravity, density, voids, water absorption and bulking.

205-1992 Broken brick (burnt clay) fine aggregate for use in the lime mortar.

205-1992 Fly Ash.

3812(Pt.I) Fly Ash for use as pozzolana.

3812(Pt.II) Fly Ash for use as admixture for concrete.

3812(Pt.III) Fly Ash for use as fine aggregate for mortar and concrete.

205-1992 Methods of physical tests for hydraulic cement.

205-1992 Lime pozzolana mixture.

205-1992 Methods of test for building lime.

(Pt. 1 to 10) Methods of Test for building lime.

205-1992 Method and sampling for test of water.

205-1992 Rapid hardening aneled cement.

205-1992 Hydrophobic cement.

205-1992 43 grade ordinary _aneled_ cement.

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4. CONCRETE WORK:

205-1992 Coarse and fine aggregate from natural sources for concrete.

205-1992 Code of practice for plain and reinforced concrete.

205-1992 Method of test for strength of concrete.

205-1992 Method of sampling and analysis of concrete.

205-1992 Bitumen felt for water proofing and damp proofing.

1200(Pt.II) Method of measurement of cement concrete work.

205-1992 Method of test for aggregate of concrete.

2386(Pt.I) Test for particle size & shape.

2386(Pt.II) Test for estimation of deleterious materials and organic impurities.

2386(Pt.III) Test for specific gravity, density, voids water absorption & bulking.

2386(Pt.IV) Mechanical properties.

205-1992 Specification for integral water proofing compounds.

205-1992 Specification for cinder aggregate for use in lime concrete.

205-1992 Fly Ash.

3812(Pt.I) Fly ash for use pozzolane.

3812(Pt.II) Fly ash for use as admixture for concrete.

3812(Pt.III) Fly ash for use as fine aggregate for mortar and concrete.

205-1992 Admixtures for concrete.

5. RCC WORK:

432-1982(Pt.I)Mild steel and medium tensile bars and hard drawn steel wire for concrete reinforcement.

432(Pt.II) Mild steel and medium tensile bars.

205-1992 Code of practice for plain and reinforced concrete.

205-1992 Methods of test for strength of concrete.

205-1992 Structural steel.

1199 –1959 Methods of sampling and analysis of concrete.

205-1992 Hard drawn steel wire fabricator concrete reinforcements.

205-1992 Cold twisted steel bars for concrete reinforcement.

205-1992 Method for bend test.

205-1992 Method for tensile testing of steel product.

1200(Pt.III) Method of measurement of cement of form work.

205-1992 Code of practice for bending & fixing bars for concrete reinforcement

205-1992 Batch type concrete mixes.

205-1992 Code of practice for prestressed concrete.

205-_ Code of practice for design & construction of foundations.

2911(pt.1/Sec.l)Driven cast in situ concrete piles.

2911(Pt.1/Sec.2)Under reamed pile foundations.

2911(Pt./Sec.3) Drawn pre-cast piles.

2911(Pt.III) Bored cast in situ piles.

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BRICK WORK :

205-1992 Specification of bldg. Lime.

205-1992 Common burnt clay bldg. Bricks.

1200(Pt.III) Method of measurements of brick work.

205-1992 Code of practice for brick work.

205-1992 Classification of burnt clay solid bricks.

12894-1990 Fly ash lime bricks.

3495-1973(Pt.I to IV) Method of test for clay building work.

205-1992 Method for sampling of clay building work.

205-1992 Method for sampling of clay building bricks.

STONE WORK

1121-1974(Pt.I) Methods for determination of compressive, transverse and shear Strength of natural building stones.

205-1992 Methods for determination of specific gravity and porosity

205-1993 natural building stones.

205-1992 Methods for petrographical examination of natural building stones.

205-1992 Methods of test for water absorption natural building stones.

205-1992 Specification for lime stones.

205-1992 Dressing of natural building stones.

1200(Pt.VI) Method of measurement of stone masonry.

1597-1967(Pt.I) Code of practice for construction of Rubble stone masonry.

1597-1967(Pt.II) Code of practice for construction of ashlar masonry.

205-1992 Glossary of Terms relating to quarrying and dressing.

205-1992 Construction of hollow concrete block masonry.

4101(Pt.I) Code of practice for external facings and veneers.

4101(Pt.II) Code of practice for external facings and veneers (cement conc. Facings).

12440-1988 Specifications for pre-cast concrete stone masonry block.

8. WOOD WORK

204-1991(pt.I) Specification for tower bolt. 204-1992(Pt.II) Specification for non ferrous metals.

205-1992 Specification for door handles.

205-1992 Recommendations for max. permissible moisture of timbers used for different purposes.

1003(Pt.I) Timber _aneled and glazed shutter (door shutters).

1003(Pt.II) -do- (window & ventilator)

1200 (Pt.XIV) Method of measurement of bldg. & Civil Engg. Work glazing.

1200(Pt.XII) -do- (Wood & Joinery work)

205-1992 Specification of steel butt hinges.

205-1992 Non-ferrous metal butt hinges.

9. **ALUMINUM WORKS**

IS – 733	Specification for wrought aluminum and aluminum alloys, bars, rods and sections.
IS – 1285	Specification for wrought aluminum and aluminum alloys, extruded round tube
13 – 1200	and hollow sections.
IS – 1948	Size of aluminum doors, windows and ventilators.
IS – 617	Specification for aluminum and aluminum alloy ingots and casting.
IS - 6177	Specification for aluminum and aluminum alloy ingots and casting.
IS - 737	Specification for wrought aluminum and aluminum alloys sheets and strip.
	And other relevant IS Code like IS – 1868, IS – 12823, IS – 6315 etc.

ANNEXURES

SPECIMEN OF LETTER OF CONTRACTOR'S ACCEPTANCE OF PROVISIONAL REDUCTION OF RATE FOR SUBSTANDARD WORK.

No.	dt.	
То		
	······································	
Sir,		
	Subject: (Complete name of work)	
	Reference: Your letter No	
dated	I/We have carefully read the terms and conditions offered in you and they are acceptable to me/us.	our letter
final and bin	Pending the decision of the Engineer in Charge of the final rates of items of work specified in the statement attached to your above letter, which items of work agree to the same being paid at the provisional rates indicate said item of work for the above work as mentioned in your statement.	ch will be
	Yours faithfully,	
	Contractor(s)	

PROFORMA OF BANK GUARANTEE FOR REMOVAL OF PLANT & EQUIPMENT FROM THE SITE OF COAL INDIA LIMITED/SUBSIDIARY COMPANY.

In consideration of Central Coalfields Limited (thereafter called "the Company" which expression shall repugnant to the subject or context includes its successors and assigns) having agreed to under the terms & conditions of the Contract No
We, the Bank agree that the Company shall be the sole judge as to whether the said contractor has failed/neglected in bringing back the plant & equipment to the site and the amount has become due for such failure and the decision of the company in this behalf shall be final and binding on us.
We, the said Bank further agree that the Guarantee herein contained shall remain in full force and effect upto and any claim received after the said date shall in no case be bind the Bank.
Notwithstanding anything contained herein the liabilities of the said Bank under this Guarantee are restricted to Rs
We, the said Bank lastly undertake not to revoke this guarantee under its currency except with the previous consent of the Company in writing and agree that any change in the constitution of the said Contractor or the said Bank shall not discharge off the liabilities hereunder.
This Guarantee is issued by Sri who is authorized by the Bank.
Under jurisdiction of Court only.

PROFORMA OF BANK GURANTEE FOR PERFORMANCE SECURITY OF THE CONTRACT

To

Re:	Bank Guarantee in respect of Contract No			
	Dated Between (name of the Company)			
	and (name of the Contractor)			
execut	M/s (Name and address of the Contractor) (hereinafter called "the actor" with M/S (name of the Company) (hereinafter called "the Company") to e			
	It has been agreed that the Contractor shall furnish the Bank Guarantee from a alised bank for a sum of Rs as security for due compliance and performance of ms and conditions of the said contract.			
Contra	The (name of the Bank) having its Office at has at the request of the actor agreed to give the Guarantor hereinafter contained.			
terms a the Ba sum of the Co	We, the Bank (hereinafter called "the Bank" do hereby unconditionally with the Company that if the contractor shall in any way fail to observe or perform the and conditions of the said contract or shall commit any breach of its obligation thereunder, nk shall on demand and without any objection or demur to pay to the company the said f Rs or such portion as shall then remain due with interest without requiring mpany to have recourse to any legal remedy that may be available to it to compel the Bank the sum, or failing on the company to compel such payment by the contractor.			
not be pay or	Any such demand shall be conclusive as regards the liability of the Contractor to the ny and as regards the amount payable by the Bank under this Guarantee. The Bank shall entitled to withhold payment on the ground that the Contractor has disputed its liability to has disputed the quantum of the amount or that any arbitration proceeding or legal ding is pending between the company and the Contractor regarding the claim.			

This Guarantee shall remain in force until the dues of the company in respect of the said sum of Rs...... and interest are fully satisfied and the Company certifies that the Contract has been fully carried out by the Contractor and discharged the guarantee.

The Bank further agrees with the company that the company shall have the fullest liberty without consent of the Bank and without affecting in any way the obligations hereunder to vary any of the terms and conditions of the said contract or to extend time for performance of the said contract from time to time or to postpone for any time or from time to time any of the powers exercisable by the Company against the contractor and to forebear to enforce any of the terms and conditions relating to the said Contract and the Bank shall not be relieved from its liability

By reason of such failure or extension being granted to the Contractor or to any forbearance, act or omissions on the part of the company or any indulgence by the Company to the Contractor or any other matter or thing whatsoever which under the law relating to sureties would but for this provision have the effect or relieving or discharging the Guarantor.

The Bank further agrees that in case this Guarantee is required for a longer period and it is not extended by the Bank beyond the period specified above the Bank shall pay to the company the said sum of Rs...... or such lesser sum as may then be deemed to the Company and as the Company may require.

Notwithstanding anything contained herein the liability of the Bank under this Guarantee is restricted to Rs the guarantee shall remain in force till the day of
This guarantee will not be discharged due to the change in the constitution of the Bank or
the Contractor.
The Bank has under its constitution power to give this Guarantee and Sri who has signed it on behalf of the Bank has authority to do so.
Dated., this day of
Signature of the authorized person
For and on behalf of the Bank
Place
Under jurisdiction of court only.

PROFORMA OF BANK GUARANTEE FOR MOBILISATION/ LUMP -SUM ADVANCE.

M/s. Central Coalfields Limited, Darbhanga House, Ranchi.

Dear	Sir.

We...... Bank agree that the company shall be the sole judge as to whether the said contractor has failed/neglected in performing any of the terms and conditions of the said contract and the decision of the company in this behalf shall be final and binding on us.

We the said Bank further agree that the Guarantee herein contained shall remain in full force and effect upto and any claim received after the said date shall in no case bind the Bank.

The Company shall have the fullest liberty without affecting in any way the liability of the Bank under this guarantee or indemnity from time to time vary any of the terms and conditions of the said contract or to extend the time of performance by the said contractor or to postpone any time and from time to time any of the powers exercisable by it against the said contractor and either to enforce or to forbear from enforcing any of the terms and conditions governing the said contract or securities available to the company and the said Bank shall not be released from its liability under these presents.

Notwithstanding anything contained herein the liability of the said Bank under this guarantee is restricted to Rs...... and this Guarantee shall come into force from the date hereof and shall remain in full force and effect till Unless the written demand or claim under this guarantee is made by the Company with us on or before all rights of the company under this guarantee shall cease to have any effect and we shall be relieved and discharged from our liabilities hereunder.

We the said Bank lastly undertake not to revoke this guarantee during its currency except with the previous consent of the company in writing and agree that any change in the constitution of the said contractor or the said bank shall not discharge our liability hereunder.

This guarantee issued by Sri	. who is authorised by the Bank.
Under jurisdiction of Court only	

PROFORMA FOR AFFIDAVIT TO BE SUBMITTED BY THE TENDERER

Non Judicial Stamp Paper.

AFFIDAVIT

I, Repr	esentative of M/S, Proprietor/ Partner/Legal Attorney/ Accredited esentative of M/S, solemnly declare that :
1.	We are submitting Tender for the Work
	against Tender Notice No dtd
2.	None of the Partners of our firm is relative of employee of Central coalfields limited.
3.	None of the Partners of our firm has either individually or collectively has been involved in any criminal offences.
4.	That we shall not employ any close relative of CCL employee in this work.
5.	All information furnished by us in respect of fulfillment of eligibility criteria and qualification information of this Tender is complete, correct and true.
6.	All documents/ credentials submitted along with this Tender are genuine, authentic, true and valid.
7.	We shall abide by the prevailing contractual norms of the company.
8.	If any information and document submitted is found to be false/ incorrect any time, department may cancel my Tender and action as deemed fit may be taken against us, including termination of the contract, forfeiture of all dues including Earnest Money and banning / delisting of our firm and all partners of the firm etc.
	Signature of the Tenderer
	Dated

Seal of Notary

ANNEXURE-VI.

PROFORRMA FOR EXECUTION OF AGREEMENT. STAMP PAPER.

day of between (Name of
ce at
which expression shall, unless repugnant to the subject or
assignees) of the one part and (Name of the Contractor)
hip/proprietorship/ Ltd. Co. etc.) firm under the name and
(hereinafter called the 'said Contractor'
ontext requires otherwise include them and their respective
egal representatives) of the other part.
d tenders for the work of "
reas the said Contractor/Firm submitted tender for the said
as Earnest Money and whereas the tender of
y the Company for execution of the said work.
MENT WITNESSETH AS FOLLOWS:
pressions shall have the same meaning as are respectively
hereinafter referred to.
are annexures to this agreement should be deemed to form
this agreement viz.
Tender Notice (Page to)
General terms & conditions. Special conditions and
General technical specification (Page to)
The probable Quantities and Amount (Page to)
Negotiation letters –
of Acceptance/Work Order (Page to)
Drawings (Page to)

3) In consider	ration fo	or the payment of the sum of Rs(W	O Value; both in words and figures
) or such other	er sum a	s may be arrived at under the clause of t	he specification relating to Payment
by items mea	y items measurements at unit prices by the Company, the said Contractor shall, subject to the		
terms & cond	lition co	ntained herein execute and complete the	work as described and to the extent
of probable	quantitie	es as indicated in Schedule B with suc	ch variations by way of alteration,
addition to or	reducti	on from the said works	
4. The compa	any has	converted a sum of Rs	only, from the amount
of Rs		deposited by the said	contractor as Earnest Money, into
'Initial Secur	rity Dep	posit' of 1% of the awarded work val	ue. The excess/balance amount of
earnest mone	y shall	be adjusted in the RA Bill(s).	
5. The said co	ontracto	r hereby convenants with the company t	hat the Company shall retain a sum
of Rs		or such sum as may	be arrived at based on the executed
value of the	work, as	s security deposit for the fulfilment of the	ne contract to the satisfaction of the
Company.			
IN WITNESS	S WHEI	REOF THE parties herein have set their l	nands and seals the date and year
above writter	1.		
	1	Partner.	Signature
·	2	Partner	Signature
(On behal	f of M/S	
7	The Con	tractor, as one of the constituted attorney	<i>'</i> ,
I	n the pro	esence of –	
1	. Name		Signature
	Addres	s:	
	Occupa	ation:	
Signed by	Sri	on behalf of	Signature
(Name of	Compan	y) in presence of -	
1	. Nam	e:	Signature
2	. Addr	ess: .	
=	=====		====

ANNEXURE-VII

PROFORMA OF BANK GUARANTEE IN LIEU OF EARNEST MONEY.

M/s. Central Coalfields Limited, Darbhanga House, Ranchi.

Dear Sir,
In consideration of The
2) We,
3)We, the said Bank further agree that the Guarantee herein contained shall come into force from the date hereof and shall remain in full force and effect till a demand or claim under this Guarantee is made on us in writing on or before the
4) We, the said Bank lastly undertake not to revoke this Guarantee during its currency except with the previous consent of the company in writing and agree that any change in the constitution of the said Tenderer or the Bank shall not discharge our liability hereunder.
5. This guarantee is issued by Sri who is authorized by the Bank.
Under jurisdiction of court only.

ANNEXURE-VIII

Non Judicial Stamp Paper Of Rs.5/-

AFFIDAVIT

1.	I	
	solemnly decla	
2.	I/We are submitting tender for the work	
	Tender Notice No.	E
3.	I/We shall abide by CMPF/any other appropriate PF Documents and ensure implementation of the same and allied scheme framed there under is respect of the workers	Misc. Provisions therein and
Seal of	f Notary	
		Signature of the Tenderer
		Date

INTEGRITY PACT

Between

Detween
Central Coalfields Limited (CCL) hereinafter referred to as "The Principal"
And
hereinafter referred to as "The Bidder/Contractor"

Preamble

The Principal intends to award, under laid down organizational procedures, contracts for
The Principal values full compliance with all relevant laws and regulations, and the
principles of economic use of resources, and of fairness and transparency in its relations with its
Bidder/s and Contractor/s. In order to achieve these goals, the Principal cooperates with the
international Non-Governmental Organisation""Transparency International"(TI). Following TI's national
and international experience, the Principal will appoint an external independent Monitor who will
monitor the tender process and the execution of the contract for compliance with the principles
mentioned above.

Section 1 - Commitments of the Principal:

- 1. The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:
 - a. No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for him/herself or third person, any material or immaterial benefit which he/she is not legally entitled to.
 - i. The Principal will, during the tender process treat all Bidders with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidders the same information and will not provide to any Bidder confidential/additional information through which the Bidder could obtain an advantage in relation to the tender process or the contract execution.
 - ii. The Principal will exclude from the process all known prejudiced persons.
- 2. If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the relevant Anti-Corruption Laws of India, or if there be a substantive suspicion in this regard, the Principal will inform its Vigilance Office and in addition can initiate disciplinary actions.

Section 2 - Commitments of the Bidder/Contractor:

- 1. The Bidder/Contractor commits itself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.
 - i. No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for him/herself or third person, any material or immaterial benefit which he/she is not legally entitled to.
 - ii. The Principal will, during the tender process treat all Bidders with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidders the same information and will not provide to any Bidder confidential/additional information through which the Bidder could obtain an advantage in relation to the tender process or the contract execution.
 - i. The Bidder/Contractor will not, directly or through any other person or firm offer promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material or immaterial benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.

- ii. The Bidder/Contractor will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
- iii. The Bidder/Contractor will not commit any offence under the relevant Anticorruption Laws of India; further the Bidder/Contractor will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship regarding plans, technical proposals and business details including information contained or transmitted electronically.
- iv. The Bidder/Contractor will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.
- v. The Bidder/Contractor will not instigate third persons to commit offences outlined above or be an accessory to such offences.

Section 3 - Disqualification from tender process and exclusion from future contracts:

If the Bidder, before contract award has committed a transgression through a violation of Section 2 or in any other form such as to put his reliability or credibility as Bidder into question, the Principal is **Integrity Pact(Cont..)** entitled to disqualify the Bidder from the tender process or to terminate the contract, if already signed, for such reason.

- 1. If the Bidder/Contractor has committed a transgression through a violation of Section 2 such as to put his reliability or credibility into question, the Principal is entitled also to exclude the Bidder/Contractor from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of the transgression. The severity will be determined by the circumstances of the case, in particular the number of transgressions, the position of the transgressors within the company hierarchy of the Bidder and the amount of damage. The exclusion will be imposed for a minimum of 6 months and maximum of 3 years.
- 2. The Bidder accepts and undertakes to respect and uphold the Principal's absolute right to resort to any impose such exclusion and further accepts and undertakes not to challenge or question such exclusion on any ground, including the lack of any hearing before the decision to resort to such exclusion is taken. This undertaking is given freely and after obtaining independent legal advice.
- 3. If the Bidder/Contractor can prove that he has restored/recouped the damaged caused by him and has installed a suitable corruption prevention system, the Principal may revoke the exclusion prematurely.

Section 4 - Compensation for Damages:

- 1. If the Principal has disqualified the Bidder from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover from the Bidder liquidated damages equivalent to 3% of the value of the offer or the amount equivalent to Earnest Money Deposit/Bid Security, whichever is higher.
- 2. If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to Section 3, the Principal shall be entitled to demand and recover from the Contractor liquidated damages equivalent to 5% of the contract value or the amount equivalent to Security Deposit/Performance Bank Guarantee, whichever is higher
- 3. The Bidder agrees and undertakes to pay the said amounts without protest or demur subject only to condition that if the Bidder/Contractor can prove and establish that the exclusion of the Bidder from the tender process or the termination of the contract after the contract award has caused no damage or less damage than the amount of the liquidated damages, the Bidder/Contractor shall compensate the Principal only to the extent of the damage in the amount proved.

Section 5 - Previous transgression:

- 1. The Bidder declares that no previous transgressions occurred in the last 3 years with any other Company in any country conforming to the TI approach or with any other Public Sector Enterprise in India that could justify his exclusion from the tender process.
- 2. If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

Section 6 - Equal treatment of all Bidders/Contracts/Subcontractors:

- 1. The Bidder/Contractor undertakes to demand from all subcontractors a commitment in conformity with this Integrity Pact, and to submit it to the Principal before contract signing.
- 2. The Principal will enter into agreements with identical conditions as this one with all Bidders, Contractors and Subcontractors.
- 3. The Principal will disqualify from the tender process all bidders who do not sign this Pact or violate its provisions.

Section 7 - Criminal charges against violating Bidders/Contractors/ Subcontractors:

If the Principal obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the Vigilance Office.

Section 8 - External Independent Monitor/Monitors (three in number depending on the size of the contract) (to be decided by the Chairperson of the Principal):

- 1. The Principal appoints competent and credible external independent Monitor for this Pact. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.
- 2. The Monitor is not subject o instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the Chairperson of the Board of the Principal.
- 3. The Contractor accepts that the Monitor has the right to access without restriction to all Project documentation of the Principal including that provided by the Contractor. The Contractor will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to Subcontractors. The Monitor is under contractual obligation to treat the information and documents of the Bidder/Contractor/Subcontractor with confidentiality.
- 4. The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.
- 5. As soon as the Monitor notices, or believes to notice, a violation of this agreement, he will so inform the Management of the principal and request the management to discontinue or heal the violation, or to take other relevant action. The Monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from parties that they act in specific manner, refrain from action or tolerate action.
- 6. The Monitor will submit a written report to the Chairperson of the Board of the Principal within 8 to 10 weeks from the date of reference or intimation to him by the' Principal' and, should the occasion arise, submit proposals for correcting problematic situations.
- 7. Monitor shall be entitled to compensation on the same terms as being extended to/provided to Outside Expert Committee members/Chairman as prevailing with Principal.
- 8. If the Monitor has reported to the Chairperson of the Board a substantiated suspicion of an offence under relevant Anti-Corruption Laws of India, and the Chairperson has not, within reasonable time, taken visible action to proceed against such offence or reported it to the Vigilance Office, the Monitor may also transmit this information directly to the Central Vigilance Commissioner, Government of India.
- 9. The word 'Monitor' would include both singular and plural.

Section 9 - Pact Duration:

This Pact begins when both parties have legally signed it. It expires for the Contractor 12 months after the last payment under the respective contract, and for all other Bidders 6 months after the contract has been awarded.

If any claim is made/lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged/determined by Chairperson of the Principal.

Section 10 - Other provisions:

- 1. This agreement is subject to Indian Law. Place of performance and jurisdiction is the Registered Office of the Principal i.e. Ranchi.
- 2. Changes and supplements as well as termination notices need to be made in writing Side agreements have not been made.

- 3. If the Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.
- 4. Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

For the Principal	For the Bidder/Contractor		
Place	Witness 1		
Date	Witness 2		

(APPLICABLE FOR WORKS OF ESTIMATED VALUE OF OVER RS. 1.00 CRORE).

DECLARATION

We have read the tender document and the enclosed NIT and understood all provisions and specifications in totality. All terms and conditions are acceptable to us. We do not have any terms and conditions of our own.

മമ		
Sea	•	

Date:

Signature of the Tenderer

SPECIFICATION/GENERAL CONSITIONS FOR ELECTRICAL WORKS

- 1. The installation shall generally be carried out in conformity to the Indian Standard specifications and code of practice for electrical work, but where the specifications, attached to the tender differ from these specifications, these specifications shall be folded.
- 2. In case where the I.S. specifications and these specifications are found wanting, the work shall be carried out as per relevant lates code of practice recommended by B.S.S.
- 3. In addition, the installation shall comply in all respects with the requirements of Indian Electricity Act.1970, amended upto date and Indian Electricity Rules.1q956 there under and the special requirements, if any of the State Electricity Board.
- 4. The successful tenderer shall give all notices required by the said Act etc. He shall also undertake to provide test certificate and get the installation approved by the authorities. The tenderer must include in their rates any fee to Govt.and arrange all sanction from Governing bodies etc.as required.
- 5. All materials fittings, appliances etc.used in the Electrical Installation shall conform to the latest relevant Indian Standard Specifications, where ever these exist in the absence of I.S.specifications, relevant B.S.standard shall be applicable.
- 6. All cables and flexible cords shall be accompanied by the makers test certificates stating the class and giving result of the insulation test.
- 7. In case of materials for which standard specification do not exist, the materials shall be approved by the consultant.
- 8. No wiring shall be laid under the floors unless it is absolutely inescapable. In case this is unavoidable it should pass through class 'B' water tight galvanized iron pipes and not through ordinary conduit. No extra payment shall be made on this account.
- 9(a) Point wiring shall consist of branches wiring for final sub-distribution board together with the controlling switch (or push) as for as and including the ceiling rose or any other approved termination of socket outlet. In case of more than one light point is controlled by the same switch, the wiring upto the ceiling rose or any other approved terminations of the first light point including the switch shall be considered as a primary point, loop wiring from light to light shall be considered as a secondary point and the distinguishing rate shall be quoted.
- (b) A three pin socket outlet point shall include the earth continuity bare copper conductor of no.14 SWG from the earth pin to the terminal or bus at the final distribution center.
- (c) Wiring shall be done in 'Looping system and phase or live conductor shall be looped at switch box and natural condition from light, fan or socket outlets.
- 10(a) In estimating the current to be carried out by any conductor, incandescent jumps, shall be rates at 100 watts, the ceiling fans shall be rated at 80 watts, table fans and ordinary socket points at 60 watts, flourscent lamps of 4 ft.at 50 watts and 2

ft. at 25 watts and power socket outlet at 1000 watts, unless the actual values are specified.

(b) Lights fans, and socket outlet may worked on a common circuit. Such sub circuits shall not have more than a total of 8 points of lights, fans and sockets outlets. The load of such circuits shall be restricted to 800 watts. The number of socket outlets shall not be more than two per circuit.

As regards power sub-circuits, the outlet shall be provided according to the load design for these circuits, but in no case shall these be more than two outlets on each circuit.

11. Rates

The rate for wiring light, fan and plug points given in the schedule of wok attached with the tender, shall be irrespective of the length of points. Circuit wires of these points shall also form part of the point rate. The conductor for final sub. Circuit for points shall have a nominal cross section area not less than 3/.036" (2.5mm2) copper conductor or equivalent aluminium conductor for light and fan circuit and 7/.36"(4mm2) for power sub-circuit wiring of same phase shall be drawn in same conduit in case of general light and power wiring separate conduit shall be laid for each services such as light/power/emergency light/power, telephone, music,T.V.,F.A. and P.A. system etc. No extra payment other then point rate will be made to the contractor.

(a) The contractor shall prepare fabrication and detailed working drawings and obtain the approval of the EIC. All work shall be carried out only on approval of these drawings. However approval of the drawings does not relieve the contractor of his responsibility to meet with the intent of the specifications.

The virtual completion certificate will not be issued till the drawings are submitted.

12. Erection of conduit

- (a) The conduit shall be properly and tightly screwed between the various lengths and to the boxes to which it runs and terminal so that the wiring is continuously and effectively projected therewith it s entire length. No part of the conduit shall by under mechanical stories and the whole conduit system shall be electrically and mechanically continuous throughout.
- (b) Corners shall be turned by means of easy bends or sets made could without altering the section of opening the same. The radius of every conduit bend shall be such as to allow compliance with regulation B-32 of the I.E.E. Regulations for bends in cables and in addition the inner radius of the bend shall not be less than 2.5 time the outside diameter of the conduit.
- (c) Where conduits are connected by means of a socket the ends of the conduits shall but together in the center of the socket and except in the case of running joints, no exposed threads shall be visible after erection.
- (d) Where running joints are used, they shall be thoroughly coated immediately after erection with zone chromate primer and then painted. Where the finish of the conduit is damaged in erection it shall be immediately made good with an approved metallic paint. All vice marks shall be removed and the conduit well protected where the paint galvanized has cracked or flaked.

13. Position of lighting, distribution Boards and switchgears

- (a) The recommended positions of the lighting points control switches distribution boards and switchgears as shown on the layout drawing will be adhered to as far as practicable.
- (b) Should there by any discrepancy or incomplete description, ambiguity or omission in the drawings and covering the same draw attention of the Architect/consultant.
- (c) Before commencement of work, the exact final position of all points switch boxes and the distribution boards shall be as included by the tenderer from the Architects representative.

14. Samples

The contractor shall submit 2 sets of samples of accessories and apparatus, he propose to use in the installation to the EIC for approval drawings or samples as required shall be submitted by the contractor and this specifications shall not be departed from without and written instructions from the EIC.

(a) Conduit Wiring

All metallic conduits shall be heavy gauge resistance welded and screwed electrical thread, manufactured in accordance with IS:1655:1972.

- (b) No smaller size than 20mm diameter conduit shall be employed unless otherwise specified and conduits accessories shall be stove enameled.
- (c) All conduits shall be of ample size to give easy "drew in" and "out" of all the cables in the conduits and the number of conductors shall not exceed that laid down as per appendix (i) IS and shall leave 40% free space for ventilation purposes.
- (d) Care shall be taken to ensure that all conduits are adequately protected while stones on site prior to erection and no damaged conduit shall be used.
- (e) All ends of conduits shall be reamed and filled to remove rough edges and inside surface of conduits shall be smooth and free from burrs and all other defects.
- (f) Conduits showing traces of rust shall be wire brushed and painted with an approved metallic paint.

Accessories

- (a) All conduit accessories shall be of malleable iron sheet steel.
- (b) All fitments and gaddles shall be stove enameled or galvanized to match the conduits specified for the various areas.

B.S.Circular Boxes

- (a) Circular conduit boxes shall be of malleable iron complete with heavy duty covers manufactured in accordance with lates ISS.
- (b) Normal or half normal manufactured bends and sockets or inspection elbows or Tee pieces will not be permitted.

- (c) For surface work the boxes shall be raised back pattern type, designed for use with distance saddles to give clearance of approximately 6mm between the back of the conduit and the fixing surface.
- (d) Boxes with 50mm center fixing holes shall be employed and box cover fixing screws shall be round head brass.

2. **DRAW-IN-BOXES**

(a) Draw-in-boxes shall be of malleable iron and the maximum number of entry holes shall be generally limited and not exceed 4 in any case.

3. ADAPTABLE BOXES

- (a) Adaptable boxes shall be of 14 gauge pressed steel where enameled conduit is specified and of galvanized iron where galvanized conduit is specified.
- (b) Minimum size box to be used shall be 75mm square by 50mm deep for cables upto 6 Sq.mm or conduits upto 25m diameter and not smaller than 150mm x 75mmx 75mm deep of large cables or conduits.
- (c) Boxes of the weather proof of water tight patterns, as applicable shall be employed in all situations exposed to dampness.

4. STOPPING PLUGS

Stopping plugs shall be the hexagon headed type.

5. BRASS BUSHES

All bushes shall be manufactured from best quality brass male type and hexagon headed of standard light.

6. LOCK NUTS

Lock nuts shall be of steel drop forged castellated hexagon type.

7. CAMPETS

All crumpets shall be of the heavy type and of the correct size for the conduit being fixed.

8. FLANGED COUPLING

- (a) Flanged couplings shall be of the machined faced type and complete with lead compression washers.
- (b) Thread less couplings and connectors will not be permitted.

9. COMPRESSION WASHERS

Compression washers for ensuring continuity at conduit connections shall be the steel shock proof type.

SADDLES

10. All saddles used to secure surface conduits shall be of the malleable iron distance type that will secure conduits not less than 5mm. Clear of the surface. The saddles tops shall be fixed by means of round headed brass screws.

11. PREPARATION OF CONDUIT

- (a) The inside surface and ends of conduits and fittings used in connection therewith, shall be smooth, cut square and free from burrs and all other defects. Reamers shall be used on the ends of all conduits after screw threads have been cut and all grease enamel etc.removed.
- (b) All threads shall be clean and free from rust. Powered soap stone, tallow or prepared compounds shall be used is lubricants to facilitate the puling in of conductors. Oil grease shall not be used.
- (c) Talow or other approved lubricant shall be used where threads are cut.

13. TERMINATION AT SHEET METAL BOXES ETC.

- (a) Where conduit terminates at turnking or shet metal boxes of any decription that are not provided with an integral cast spout, a flanged coupling with lead integral cost spout, a flanged coupling with lead washer and male brass hexagon bush shall be used.
- (b) Where a number of conduits are brought to a central point of permanent access. Press steel adaptable boxes shall be used. The boxes shall be of sample size to take all conduits without crowding the conduit terminating by means of a socket bearing on the outside of the box, and a hexagonal head smooth bore make brass bush screwed into the socket from the inside of the body, the bushing being made up sufficiently tight to draw the socket into firm electrical contact with the box.

15. Contact with other Services

All conduits shall be kept of other services, except where intentionally earthed or bended. Conduits shall be fixed to prevent contact with same at the following minimum saddings.

- (a) 150mm (6") away from hot water services.
- (b) 50 mm (2") away from all other services.

16. **Protection of Open Conduit Ends**

- (a) Particular care shall be taken during the progress of the works to prevent the incase of dirt and rubbish such as plaster droppings into erected conduits. A run of conduit which has become so clogged shall be entirely free of these accumulations or will be replaced.
- (b) All unused conduit entries shall be blanked off in an approved manner and where conduits terminate in adaptable boxes, all removal box covers shall be firmly scored to provided complete enclosures.

17. Removal of Moisture etc.

It considered necessary by the Engineer-in-charge the conduits shall be swabbed out by drawing by swabs of rag through the conduit to remove all moisture prior to any cable being drawn in.

18. Completion Prior to Wiring

- (a) All conduit installations must be completed and erected in their entirely before they are wired and must be fully rewire able from outlets to distribution boards or trunking system etc.to which they connect.
- (b) No wiring of any part of the installation shall commence until instructions are received to do so from the Engineer at such times as he is satisfied that the wiring will not be damaged due to building operations.

19. Method of Installation Concealed Conduits

- (a) For concealed work, the whole of the conduit shall be installed such as manner that rewiring can be carried out from the outlet boxes and switch boxes only.
- (b) Draw-in-boxes will only be permitted in special instances approved by and at the direction of the Engineer.
- (c) All general conduit installation requirements set out above shall apply to concealed work.

20. Fixing Conduit and Accessories

- (a) Where concealed conduits are to be covered in walls, floors etc.they shall be fixed by approved methods using pipe hooks spaced not more than 1.50mtr.aprt and shall be firm against structure along there length without spring.
- (b) Switch boxes and socket boxes etc.shall be securely fixed by firmly grounded in position prior to plastering of screeding.
- (c) Where conduits are concealed in wall chase, they shall be recessed in such a manner that they will be finally covered by the full thickness of plaster and/or rendering to a minimum depth if 12.5mm.

21. Inspection and Approval

No conduits shall be buried in concrete or plaster etc.until the work has been inspected by the Engineer-in-charge.

22. Protective Painting

All conduits boxes and conduit fittings which are to be buried in complete or behind plaster shall immediately after being fixed in position, be thoroughly coated with red oxide paint.

23. Extension Collars

Extension collars of suitable depth shall be used as necessary to leave all boxes absolutely flush with the finished wall or ceiling surface.

24. Conduit in Situ Concrete and Floor Screeds

Conduits run in floors shall be installed in one or more of the following ways, and as may be appropriate to the type of floor construction actually adopted.

- (a) In the middle third of the floor.
- (b) In the screeding of top of the construction floor.
- (c) Laid direct on the shuttering.

Where conduits are specified to run in floor screeds, the electrical contractor must carefully check the proposed secured depth at the position before installing conduits and shall wherever possible arrange to cross conduits where there is sample thickness of screed. If a isolated positions the crossing of conduits in shallow screeds can not be avoided arrangements may be made to set the lower conduit into a shallow chase performed in the slab subject to the approval of the Engineer-in-charge.

For flush work, conduit boxes for lighting fitting, switches and other accessories shall be installed to finish flush with the finished surface.

26. Surface Conduits

- (a) Wherever conduits have to be run on the surface of walls or ceilings, particular attention must be paid to neatness and all conduits shall be run in as conspicuous manner as possible.
- (b) Where conduits are installed in a straight runs, draw boxes shall be provided at centers not greater than 10 mtr.(30ft.)and on runs with not more than 2 right angled bends, boxes shall be provided at centers not greater than 10 mtr.(33ft.) No boxes shall be provided in voids, where access can not be readily contained.
- (c) Exposed conduits shall be installed throughout with runs parallel or perpendicular to walls or structural members with right angled turns consisting of boxes specified herein, or symmetrical bends, conditions exposed to the weather shall be so installed and equipped as to prevent water from entering the conduit. All exposed threads shall be given two coats of protective bitumastic or rust preventive paint.
- (d) Conduit which has become crushed or reformed in any way shall not be used.
- (e) The crossing of surface conduits shall not generally be permitted and to avoid such crossings adaptable boxes shall be used at junctions. Where the possibility exits, of a multiplicity of separate conduit runs, tracking may be used, subject to the approval of the Engineer.
- (f) All surface conduits shall be fixed by means of malleable iron distance saddles, unless otherwise directed by the Engineer so that the conduit stands not less than 6mm (204")clear of the surface.
- (g) The spacing of saddles shall be at 0.750 mtr.centres for 20mm, and above diameter conduit sizes. In addition, saddles shall be fixed at each side of any bend, or set. The saddles shall be 200mm from the bend of set. The saddle shall secured by means of steel counter sunk screws and metaplastic type plugs, minimum size being 40mmx0.8. In the case of galvanished installations the screws shall be made of brass.
- (h) No fixing shall be made to building boards or to plaster but only to concrete/brick work, timber studding and breeze or tile partitions.

- (i) The holes in brick work or concrete for fixing plugs shall be neatly drilled by mean of massonary drill of the appropriate size.
- (j) Where conduits are run on steel work, they will be fixed by means of saddles or caddy clips in a manner meeting with the approval of the consultant prior to the installation being carried out. Other method of fixing may be agreed in special circumstances, but approval must first be obtained from the consultant.

27. Self Drawing

- (a) Conduit shall not be laid to falls and shall be installed so that they are self draining in the event of progress of moisture due to condensation or any other reason.
- (b) A suitable drainage hole shall be drilled in the bottom of the lowest conduit box in every meter of horizontal run.

28. Inspection Boxes etc.

- (a) Small circular boxes shall be used for inspection and point boxes on conduits, upto and including 25mm diameter where inspection boxes are necessary for conduits larger than 25mm diameter, the through pattern type shall be used, unless otherwise directed by the consultant.
- (b) Where several conduits are run together, adequately size adaptable boxes, common to all runs shall be used, meeting with the approval of the Engineer, to avoid inserting inspection boxes in the individual runs. Where it is necessary to segregate wiring, metal fillets shall be securely fixed within the box.

29. Fixing of Boxes

- (a) All boxes except, those for external works shall be securely fixed by means of counter sunk screws, minimum size 40mm No.8 using approved type raw plugs.
- (b) At least one screw shall be used for mining standard circular conduit boxes and two screws for large conduit boxes and adaptable boxes unto 150mmx100mm. Size.
- (C) In all cases the fixing holes shall be suitable for counter sunk screws, so that the screws heads do not project into the boxes and all screw driver burrs shall be removed before cables are drawn in.
- (d) For external work and other particularly damp situations, galvanished cast iron, water proof boxes either external fixing lugs shall be used.
- (e) In addition to the external fixing, the boxes shall be supports by saddles spaced not more than 150mm. On each side of the box. Fixing holes shall not be drilled in the box.

30. Holes in Adaptable Boxes

Wherever boxes are filled for conduit entry, the holes shall be positioned correctly to permit all conduits to enter without sets or bends of any description.

31. Hot Spots

(a) In the case of conduits run to "hot spots" e.g. immersion heaters, room, heater insert thermostat, etc.a conduit box shall be fitted adjacent to the termination point and other flexible or solid conduit, as specified shall continue to the termination point.

(b) The box will be used as cable change box to facilitate change of wiring locally to the apparatus.

32. Recess to Surface

- (a) Where flush conduits are required to terminate at surface mounted equipment, the conduit shall terminate at a flush box and the back of the equipment shall be drilled and bushes entry. The equipment should fully cover the flush box and 2B.A.brass screws shall be used between the equipment and the box in addition to any other means of fixing or earthing arrangement.
- (b) The alternative arrangement to the above, shall be by means of fixing a terminal extension box to the flush conduit box in which case a break joint ring shall be fitted between boxes.

33. Flexible Metallic Conduit System

- (a) Except where otherwise specified, final connections to all motors, machines and other movable apparatus shall be made by means of flexible pipe conduit.
- (b) All flexible conduit shall be water proof and sheathed internally/externally with PVC of approved manufacture and all fittings shall be of the appropriate type and as recommended by the manufacturers.
- (c) Flexible pipe conduits shall be installed in such a manner to the conduit will suspend naturally and that no stress will take place due to bends and sets being created against the lay of conduit. Connections will be at both ends, by means of adaptors sweated on to the flexible pipe conduits.

34. Earthing

(a) Separate 14SWG minimum copper bare earth wire is to be drawn in each conduit for earthing the general light and power outlet upto 230 volts and 2 for 415 volts. Earth conductor size shall be in accordance with I.E.Rules, Table D-2.

PVC rigid conduit pipe

Heavy duty PVC rigid pipe shall be properly and tightly connected jointed between the various length and to the boxes. All PVC accessories shall be used except outlet boxes.

- (b) The earth conductor shall be terminated by means of drilling two holes in the conduit box, the earth wire shall pass through one hole to the outside of the x 2B.A. round headed brass screws which shall be bolted into the second hole. Two washers and two nuts shall be used with each screws.
- (c) A similar arrangement to the above shall be used at the termination to the equipment or by any other approved manner, meeting with the approval of the Engineer.

CONDUIT BOXES

Where the change from solid conduit to flexible conduit a standard conduit box shall be limited between the two of conduit. The conduct coupling shall be screwed into the spouted entry of the conduit box and the use of covers will not to permitted.

FLOOR TRUNKING AND WIRE WAY DUCT

The floor trunking shall be rust proof made out of 2mm thick mild steel sheet and of required size having partition in center or without portion with a common cover shall be provided for drawing power outlet and telephone wire knock out holes at every 600mm. Intervals on the over of trunking. These shall be provided for easy water tight tape off. Junction and floor service boxes shall be provided at convenient placed for main cable entry. Fly over for floor trunking shall be provided for cross connections batted joints shall be provided for jointing length conduit wiring outlet shall be provided as required. Conduit wiring outlet shall be proved as required conduit wiring outlet shall consist of an oval steel bush M.S.washer steel collar stopping plug wooden cap and metal screws, power outlet, telephone outlet, box shall be fixed on the surface of the floor. Floor outlet box and floor trunking shall be coupled through 25mm dia conduit nipple. A trapesidal power telephone out let box shall be provided on the floor. The wire mesh duct shall have stove enameled paint of approved shade.

SWITCHES SOCKET AND REGULATORS

- (a) S.P. tumbler/pipe switches switch socket will be flush type, mounted on metal switch plates bridge inside the box, groups of switches shall be mounted in the same box.
- (b) Fan regulators, where required, shall be flush type located in the same box as light, switch wherever possible. The regulators shall be tested before installation to ensure proper gradation of fan speed.
- (c) All socket outlet in the kitchen or in any other areas specified shall be metal clad with earth terminal and metal caps in a sheet metal box unless otherwise specified.

WIRE WAY DUCTS

- 1. Wire way duct shall be made out of 14SWG 2mm M.S sheet in suitable length a 'C' shape rectangular through with their open mouth stiffened with 12mm wide a 14SWG pipes of suitable length back welded below the lips of the ducts.
- 2. For the purpose of supports to different cables in the ducting, 3 row of 'Z' shape or as specified in bill of quantity 16SWG thick sheets are welded in the duct to make compartments. The suitable opening for making out the cables to the out goings conduits or ducts shall be made as required. These ducts shall have channel shape capping may out at 16SWG sheet with 8mm right angle shape lip at each side.
- 3. Suitable rubber gaskets shall be provided between the ducting and its capping to make it dust and varmint proof.
- 4. The duct capping shall be kept light on to the ducting with the help of screws, top and bottom sides of the ducts suitable and approved intervals.
- 5. The ducting shall be made electrically continuous be providing and fixing bends, tee connections for different length of ducts as required at site.
- 6. The M.S.ducting shall have stove enameled paint of approve shade.
- 7. Suitable arrangement for run in two numbers of earth wires and fixing it a suitable intervals shall also be made as required.
- 8. For purpose of couplings to adjacent ducts, 50mm vide, 4mm thick and coupling rings are to be fabricated and provided at site. It shall be fixed as slip in and fit into each price by approximate depth of 25mm. Suitable arrangement for

tightening coupling ring with the duct with the help of 3/16 cheese cead screws and washers etc. shall be made as per details shown in the drawing.

DISTRIBUTION BOARDS

These shall be surface/recess type distribution boards complete with required number of miniature circuit breakers (MCB) or fuse fittings as the case may be.

These distribution boards with enclosure, bus bars, neutral link and earth link shall be of the original manufacturers only as indicated in the approved lists. The sheet metal work shall brave stove enameled paint of approved shade.

The MB's shall be dully connected with the wire way ducting or conduits to make it electrically and mechanically continuous with the help of check nuts, bushes or flange plates as desired by Engineer-in-charge.

All DB's shall be required to be connected with incoming sub main cable and cut going circuit wiring with Dowel's approved equivalent crimping lugs for wires of 4mm2 or bigger sixes cables lugs shall be crimped with proper tools at site.

DB's shall be fixed on the walls or flushed with wall in approved manner and damage to wall made good as per original.

Damage to the original paint to the DB's, if any shall be made good as desired by Engineer-in-charge.

DB's shall be dust and vermin proof and shall be fabricated out of 2mm. Thick CRCA sheet steel and shall be stove enameled. These shall have hinged over and MCB's/fuse fittings shall not be operatable without opening these covers. Phase barrier and surrounded sheet also also be provided in DB blank spaces (Spares) shall be covered with blanking plates.

(a) The MCB shall have quick break trip free mechanism with thermal overload and magnetic short circuit tripling devices. The mechanism shall be such that the circuit can not be held closed against a fault. The thermal device shall prevent reclosing of a circuit when a fault of over load persist.

The contract shall be silver tungsten or other suitable material to give long contract life Multiple units shall have common inter tripping mechanism.

All the fuse fittings should be of high grade phenolic moulding and must be non hydroscopic and nonflammable and shall comply to IS: 2208.

There should be rack for storing spare fuses inside the DB label for indicating the designation of each circuit shall be provided inside the DB.

Iron clad plug sockets, 1 phase add 3 phases (as specified in some of the items in this section) shall be completed with enclosure of original manufacturer, including supply and connection MCB, plug top and earthing etc. as required. Wiring connection shall be made with the help of suitable crimping down wells lugs for 4mm 2 or higher class sizes of cables/wire.

PART – II OF TENDER

TENDER DOCUMENT ISSUE DETAILS

Name of work: — Re-wiring and replacement of D.B. and Sub D.B. and panel at CCL office, Kolkata.

Tender Notice no. & date - 65 of 10- 11 dt. 13.08.10

Date and time of submission of tender -26.08.10 upto 3.00 P.M. in the office of Dy. General Manager (TA), CCL, Ranchi OR in the Office of the Personnel Manager, CCL Office, Kolkata

Date and time of opening of Part – II – To be intimated later to eligible bidder.

Cost of Tender Document - Rs. 281.25 Inclusive of VAT @12.5 % also refer NIT.

ISSUE TO / SUBMITTED BY :

NAME OF TENDERER : POSTAL ADDRESS	
e-mail address	
Telephone No.	
Mobile No.	

For Dy. G.M (TA) CCL, Ranchi.

BOQ FOR THE WORK OF RE-WIRING AND REPLACEMENT OF D.B. AND SUB D.B. AND JPANNEL AT CCL,OFFICE, KOLKATA. Part-"A"

<u>Part-</u>					
SL.	DESCRIPTION OF WORKS	UNIT	QUNTY	RATE	AMOUNT
NO.				(in Rs.)/	(in Rs.)
1.	Point wiring in PVC conduit, with piano type switch: wiring for light point/fan point/exhaust fan point/ call bell point with 1.5 sq.mm. FR PVC insulated copper conductor single core cable in surface/recessed PVC conduit, with piano type switch, phenolic laminated sheet, suitable size MS box and earthing the point with 1.5 sq.mm FR.PVC insulated copper conductor single core cable etc. as required.for Group "B"(wire should be ISI marked)	Point.	255	305.00	77775.00
2	Circuit/sub-main wiring in PVC conduit: Wiring for circuit/sub main wiring alongwith earth wire with the following sizes of PVC insulated copper conductor, single core cable in surface/recessed PVC conduit as required. (wire should be ISI marked)	Matua	050	71.00	04050.00
	A) 2X1.5sq.mm +1X1.5sq.mm earth wire	Metre	350	71.00	24850.00
	B) 2X2.5sq.mm +1X2.5sq.mm earth wire	Metre	335	81.00	27135.00
	C) 2X4sq.mm+1X4sq.mm earth wire	Metre	200	97.00	19400.00
3	D) 2X10sq.mm+1X10sq.mm earth wire S/F Piano type switch/socket:ISI marked	Metre	445	171.00	76095.00
	Supplying and fixing following piano type switch/socket on the existing switch box/cover including connection etc. as required.				
	A) 5/6 amps switch	Each	50	17.00	850.00
	B) 3 pin 5/6 amp socket outlet	Each	50	21.00	1050.00
	C) 6 pin15/16 amp socket outlet.	Each	15	43.00	645.00
	D)15/16 amp switch	Each	15	38.00	570.00
4.	Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240 volts, on surface/recess, complete with tinned copper busbar, neutral busbar, earth bar, din bar, detachable gland plate, interconnections, phosphatized and powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator) A) 4 way, Single door	Each	04	301.00	1204.00
	B) 8 way, Single door	Each	08	372.00	2976.00
5.	S/F "B" Series, SP MCB: ISI marked Supplying and fixing 5 amps to 32 amps rating, 240 volts, "B" series, miniature circuit breaker suitable for lighting and othewr loads of following poles in the existing MCB DB complete with connection, testing and commissioning etc. as required. A) Single Pole.	Each	16	86.00	1376.00
	B) Single pole and neutral	Each	48	171.00	8208.00
	1 2/ Single polo and neather	_4011		1, 1.00	0200.00

	required.200 Amp.25 KA 151 marked		Part-"A: Es	st. Cost. Rs.	2,51,255.00
,.	Providing and fixing following rating and breaking capacity MCCB in existing cubicle panel board including drilling holes in cubicle panel, making connections, etc. as required.200 Amp.25 KA ISI marked	Laon		3301.30	3301.30
7.	B) 63 AMP S/F MCCB in cubicle panel board:	Each Each	10 01	196.00 5501.00	1960.00 5501.00
6.	S/F DP MCB isolator:ISI marked Suplying and fixing following rating, double pole,240 volts, isolator in the existing MCB DB complete with connection, testing and commissioning etc. as required, A) 40 Amp	Each	10	166.00	1660.00
SL. NO.	DESCRIPTION OF WORKS	UNIT	QUNTY	RATE (in Rs.)/	AMOUNT (in Rs.)

Note: Rate to be quoted in percentage rate basis (Both in figure and word)

My Rate is	% Above/Below	*the Estimated cost.
(*Delete which ev	er is not applicable)	

Part-	"B"				
SL. NO.	DESCRIPTION OF WORKS	UNIT	QUNTY	RATE TO BE QUOTED BY THE BIDDER (in Rs.)/	AMOUNT (in Rs.)
	Providing & fixing of the following with all materials etccomplete as required.				
1	4' x 40 W FL. Tube light, Philips/Cromp./Bajaj	Each	80		
2	Copper Choke for 20 / 40 W Tube Light., Philips/Crompton.	Each	25		
3	Starter for 40/20 W tube light Philips/crompton	Each	25		
4	Wooden Board with perpex sheet cover, Size- 8" X 12"	Each	06		
5	Wooden Board with perpex sheet cover, Size- 6" X 8"	Each	10		
6	Providing & Fixing of single FL .tube light Fitting 4' X 40 W, (Electronic) tube fitting. without tube.(Model.TMS 090/136.) Make-				
	Philips/Crompton	Each	30		
7	C/Fan Regulator Electronic type Make Anchor 400 W	Each	20		
8	Providing and laying of PVC insulated PVC sheathed Providing and laying of PVC insulated PVC sheathed Amered electric cable with aluminum conductor for working voltage 1100 volts on wall/surface, 3.5 core, 50 sq.mm.	Mtr.	25		
9	Fabrication of basbar distribution board with MS angle and MS sheet of 16 SWG of size 3'x20"x10 having copper bus bar of 300 amp. Suitable for 3 nos 100 amp. MCCB and 18 nos MCB SP, including painting and installation etc. as required.	Each	01		

Note: Part "B":-Rate to be quoted in item rate basis. (Both in figure and workd)