

- 30.3. All sums payable by way of compensation under these conditions shall be considered reasonable compensation payable to EIL with reference to the actual loss or damage sustained by EIL. The decision of the Engineer-in-Charge as to compensation claimed shall be final and binding.
- 30.4. Notwithstanding anything in the Contract to the contrary, no liabilities owed by the Contractor to EIL that is covered by insurance obtained by the Contractor or EIL pursuant to Clause 33 is included in the Contractor's aggregate liability for the purpose of determining the limit of the Contractor's liability under the Contract.
- 30.5. Neither Party shall be liable to the other Party for any kind of indirect or consequential loss or damage including, loss of use, loss of profit, loss of production or business interruption which is connected with any claim arising under the Contract.

30.6 Contractor's Care of the Works

The Contractor shall take full risk and responsibility for the care of the Works, or any part thereof, including full risk and responsibility for the care of the Works being constructed/ installed, or stored off-Site for inclusion in the Works, until the date of issue of the Completion Certificate, when risk and responsibility shall pass to EIL.

31 LIMITATION OF LIABILITY

- 31.1 The aggregate total liability of the Contractor to EIL under the Contract shall not exceed the total Contract Price, except that this Clause 31 shall not limit the liability of the Contractor for following:
- (a) In the event of breach of any Applicable Law;
 - (b) In the event of fraud, willful misconduct or illegal or unlawful acts, or gross negligence of the Contractor or any person acting on behalf of the Contractor; or
 - (c) In the event of acts or omissions of the Contractor which are contrary to the most elementary rules of diligence which a conscientious Contractor would have followed in similar circumstances; or
 - (d) In the event of any claim or loss or damage arising out of infringement of Intellectual Property; or
 - (e) For any damage to any third party, including death or injury of any third party caused by the Contractor or any person or firm acting on behalf of the Contractor in executing the Works.
- 31.2 Neither Party shall be liable to the other Party for any kind of indirect or consequential loss or damage including, loss of use, loss of profit, loss of production or business interruption which is connected with any claim arising under the Contract.

32 TERMINATION

32.1 Termination for Convenience

EIL shall, in addition to any other right enabling it to terminate the Contract, have the right to terminate the Contract at any time by giving prior written notice of at least 14 (fourteen) days to the Contractor. Such termination shall be without prejudice to the rights of the Parties that have accrued on or before the date of termination of the Contract.

32.2 Termination Due to Contractor's Default

The Contract may be terminated by EIL, at its sole and absolute discretion, upon the occurrence of any of the following events/acts committed by the Contractor (each a “**Contractor's Event of Default**”) by issuing a notice to the Contractor, stating the intention of EIL to terminate the Contract:

- (a) fails to complete Mobilisation within the Time for Mobilisation under Clause 9.3;
- (b) commits a material breach of its obligations under the Contract;
- (c) abandons or repudiates the Contract or suspends the execution of the Works during the subsistence of any Dispute under the Contract;
- (d) fails to adhere to the Specifications and/or Variations in terms of the Contract;
- (e) the Contract Price is reduced to the maximum extent specified in Clause 13.2, yet the delay in respect of which the reduction was made continues to subsist;
- (f) a petition for the winding up of the Contractor has been admitted and a liquidator or provisional liquidator has been appointed or an order of bankruptcy or an order for the winding up or dissolution of the Contractor has been made by a Court of competent jurisdiction, except voluntary change in partnership/ constitution of Contractor's organisation (if a partnership/ Company) or liquidation for the purpose of amalgamation or reconstruction subject to EIL's acceptance to continue the Contract with the re-constituted firm/ company.
- (g) Contractor fails to replace or remedy Defective Work pursuant to Clause 9.1.18;
- (h) Contractor's liability for compensation under Clause 20 reaches 10 % (ten percent) of the Contract Price and the Defect for which the compensation are/were charged continues to exist;
- (i) gives any warranty or makes any representation under the Contract which is found to be false or misleading;
- (j) fails to furnish or renew the Contract Performance Bank Guarantee;
- (k) fails to obtain and maintain insurance in accordance with its obligations under the Contract; or

- (l) commits any default under any Applicable Law.

32.3. If the Contractor fails to remedy or rectify the default stated in the notice issued by EIL under Clause 32.2 within 30 (thirty) days of receipt of such notice, EIL shall be entitled to terminate the Contract by issuing a termination notice and expel the Contractor from the Site (but without thereby releasing the Contractor from any of its obligations or liabilities under the Contract, or affecting the rights and powers conferred on EIL under the Contract up to the date of termination). However, in case of events specified in Clause 32.2 (c) and (f), EIL shall be entitled to immediately terminate the Contract without giving any notice to the Contractor.

32.4 Procedure on Termination

32.4.1 Upon termination of the Contract under Clause 32.3:

- (a) EIL may complete the Works and/or arrange for other entities to do so at the risk and Cost of the Contractor. EIL and its entities may then use the access roads, the Contractor's Documents and all other facilities made by or on behalf of the Contractor;
- (b) Call upon the whole or such portion of the Contract Performance Bank Guarantee amount as EIL may consider fit;
- (c) Recover from the Contractor the cost of carrying out the balance Works in excess of the sum which the Contractor would have been paid according to the Final Bill, if the Works had been carried out and completed by the Contractor under the terms of the Contract. The amount to be recovered may be deducted by EIL from any amount due to the Contractor under the Contract. Any amount outstanding to EIL under this Clause 32.4.1(c) shall be recovered from the Contractor as a debt due;
- (d) Enter upon the Site and expel the Contractor. EIL may, to the exclusion of any right of the Contractor, take over and use, without payment to the Contractor, any Contractor's Equipment, materials, goods, machinery or other items which are on the Site in connection with the Works for any reasonable period as EIL considers necessary for the performance and completion of the Works.

32.4.2 Upon termination of the Contract under Clause 32.3, the Contractor must either immediately or upon any date as is specified in the notice of termination:

- (a) cease all further work, except for any work EIL may specify in the notice of termination;
- (b) terminate all Subcontracts, except those to be assigned or novated to EIL in accordance with paragraph (d) below;
- (c) deliver to EIL the parts of the Works performed by the Contractor up to the date of termination;
- (d) to the extent legally possible assign or novate to EIL all right, title and benefit of the Contractor to the Works as at the date of termination, and, as may be required by EIL, in any subcontracts between the Contractor and its Subcontractors;

- (e) subject to Clause 32.4.1(d), remove all Contractor's Equipment, surplus materials (as per Clause 9.12.2 (b), scaffolding from the Site, dismantle and remove its Site offices and quarters and other Temporary Works and structures and repatriate the Contractor's Personnel from the Site, remove from the Site any wreckage, rubbish and debris of any kind, and leave the whole of the Site in a clean and safe condition; and
- (f) deliver to EIL all documents prepared by the Contractor in connection with the Works as at the date of termination.

Should the Contractor fail to comply with the provisions of sub-Clause (e) above, EIL shall have the right, at the sole risk and Cost of the Contractor, to clear the Site of all rubbish, scaffolding, surplus materials, Contractor's Equipment, machinery, dismantle and remove the Contractor's Site offices and other Temporary Works and store, sell, dispose of and/or otherwise deal with any of the above and the Contractor shall forthwith on demand pay EIL the costs and expense incurred by EIL in this regard with an additional amount equivalent to 15% (fifteen percent) of such costs and expenses to cover EIL's overheads. EIL shall have the right to recover such amounts from: (i) the proceeds of any sale or disposal of the Contractor's Equipment, machinery, surplus materials, Temporary Works or other items removed from the Site; and (ii) any amounts due to the Contractor under the Contract.

Nothing contained in this Clause or otherwise in the Contract shall constitute EIL as a trustee or bailee for or in respect of any of the Contractor's Equipment, surplus materials, machinery or other items or things removed, cleared, demolished or dismantled as mentioned above and EIL shall not be bound by any duty of care in respect thereof.

32.4.3 Notwithstanding anything contained in Clause 32.4.2 above, upon termination of the Contract, EIL may require the Contractor to:

- (a) complete or take to an intermediary stage of completion any item of the Works already commenced by the Contractor; and
- (b) take such steps as are considered necessary by the Engineer-in-Charge for properly protecting and securing the Works already completed by the Contractor.

32.5 Payment on Termination

32.5.1 If the Contract is terminated under Clause 27.7 or 32.1, the Contractor is entitled to be paid:

- (a) the Contract Price attributable to the Works performed as at the date of termination, or in the case of a termination under Clause 27.7, the commencement of the relevant event of Force Majeure; and
- (b) the costs, if any, necessarily incurred in performing the work (if any) specified in the notice of termination issued by EIL under Clause 31 or as instructed by EIL pursuant to Clause 32.4.3; and
- (c) if the Contract is terminated in accordance with Clause 31, additionally (but without duplication):
 - (i) the costs reasonably incurred by the Contractor in terminating any subcontracts

as a result of the termination of the Contract; and

- (ii) the costs reasonably incurred by the Contractor in the repatriation of the Contractor's and the Subcontractor's employees,

less the aggregate of all previous payments allocated to the Works. Any sums due to EIL from the Contractor accruing prior to the date of termination or the commencement of the relevant event of Force Majeure (as the case may be) will be deducted from the amount to be paid to the Contractor under the Contract. If, as a result of any such deductions, there is a negative amount payable to the Contractor, then the Contractor must pay an amount equal to that negative sum to EIL within 15 (fifteen) days of EIL raising an invoice for that amount.

The Contractor agrees and acknowledges that payment of termination compensation in terms of this Clause 32.5.1 shall be the sole and exclusive liability of EIL and the sole and exclusive remedy of Contractor, with respect to a termination of the Contract under Clause 32.1 or Clause 27.7.

32.5.2 If the Contract is terminated under Clause 32.3, EIL will not be bound to make any further payment to the Contractor until the full and final cost of completion of the Works by EIL or other contractors and all damage, loss or expense suffered or incurred by EIL as a result of the termination of the Contract have been ascertained.

32.5.3 Upon all cost, damages, loss and/or expense being ascertained under Clause 32.5.2, the Engineer-in-Charge must issue a certificate stating the total amount of the cost of completing the Works and any damage, loss or expense suffered or incurred by EIL as a result of the termination of the Contract.

32.5.4 If the Contract Price attributable to the Works performed as at the date of termination less the aggregate of: (a) all previous payments allocated to the Works which have been paid to the Contractor; and (b) the amount stated in the certificate under Clause 32.5.3,

- (a) is a positive amount payable to the Contractor, then EIL must pay such amount to the Contractor within 15(fifteen) Business Days of the issuance of the certificate pursuant to Clause 32.5.3; or
- (b) is a negative amount payable to the Contractor, then an amount equal to that negative sum will be a debt due and payable to EIL by the Contractor and the Contractor must pay such amount to EIL within 15 (fifteen) days of EIL raising an invoice for that amount.

33 INSURANCE

33.1. EIL shall at its own Cost, take out and maintain in effect, or cause to be taken out and maintained in effect, during the execution of the Works, a comprehensive Erection All Risks Policy (“**EIL's Insurance**”).

33.2. Without prejudice to Clause 33.1, the Contractor shall be required to take out and maintain at all times during the subsistence of this Contract, adequate insurance coverage in respect of:

- (a) any damages or compensation against claims, demands, proceeding, costs, charges and expenses, whatsoever in respect or in relation thereto, payable under Applicable Laws in respect or any consequence of any accident or injury to any Contractor's Personnel during or pursuant to their employment by the Contractor or by the Contractor's Subcontractors, save and except an accident or injury resulting from any act or fault of EIL;
- (b) all Contractor's Equipment brought on to the Site by the Contractor or its Subcontractors for use in connection with the Works, to the extent of their full value against all loss or damage from whatever cause arising; and
- (c) third party liability for physical loss of or damage to any third party property or injury to or death of any third party which may arise out of or in connection with the execution of the Works at the Site by the Contractor or EIL, (collectively "**Contractor's Insurance**").
- 33.3. EIL's Insurance and the Contractor's Insurance shall each be composite policies in the joint names of the Parties, for their respective rights and interests. The terms of EIL's Insurance and the Contractor's Insurance shall entitle the respective Parties to maintain the policies in force after termination of the Contract.
- 33.4. Either Party shall, at the request of the other Party, produce within 7 (seven) days of request, such evidence as the other may reasonably require and as is obtainable from insurers that EIL's Insurance or the Contractor's Insurance (as relevant) have been effected, which evidence may include sight of the insurance policies and confirmation of the payment of all premiums to keep the policies in force.
- If either Party fails upon request to produce to the other satisfactory evidence in accordance with this Clause 33.4 that there is in force any of EIL's Insurance or the Contractor's Insurance (as relevant), the other Party may effect and keep in force any such insurance and the Party failing to evidence insurance shall pay to the other all reasonable costs incurred by the other for such purpose.
- 33.5. Each Party shall ensure that it and its personnel, Subcontractors, servants and agents at all times:
- (a) Comply with the terms and conditions of EIL's Insurance or the Contractor's Insurance, as relevant;
- (b) Comply with the procedures for claims notification and administration there under; and
- (c) Do nothing nor omit to do anything which might entitle any insurer to refuse to pay any claim under, or which might otherwise prejudice any of EIL's Insurance or the Contractor's Insurance.
- 33.6. EIL's Insurance as well as the Contractor's Insurance, shall wherever possible, provide for 30 (thirty) days written notice of any cancellation, non-renewal or material modification of any such policy to be given by the insurers to the insured persons. Further, EIL's Insurance and the Contractor's Insurance shall contain a clause to the effect that the insurers have agreed to waive all rights of subrogation against the persons assured (including all beneficiaries thereof).

- 33.7. Regardless of the extent of settlement of claims for insurance proceeds under EIL's Insurance or under the Contractor's Insurance or the time taken for settlement of such claims, the Contractor shall promptly make good any loss or damage for which it is responsible under the terms of this Contract. The Contractor shall be reimbursed to the extent that any insurance proceeds are received and payable to the Contractor.

34 GOVERNING LAW AND JURISDICTION

- 34.1 The Contract shall be governed by and construed in accordance with the laws of India and the courts at Delhi shall have exclusive jurisdiction over all Disputes arising under or in connection with the Contract.

35 CLAIMS AND DISPUTE RESOLUTION

35.1 Claims

- 35.1.1. If the Contractor intends to claim any additional payment on the occurrence of any event which entitles the Contractor to claim such additional payment, the Contractor shall give notice to the Engineer-in-Charge as soon as possible and in any event within 10 (ten) days of the Contractor becoming aware of such event.
- 35.1.2. The Contractor shall keep such contemporary records as may be necessary to substantiate any claim. Without admitting EIL's liability, the Engineer-in-Charge may on receipt of a notice pursuant to Clause 35.1.1 above, inspect such records and may instruct the Contractor to produce and maintain further records. The Contractor shall permit the Engineer-in-Charge to inspect all such records and shall (if instructed) submit copies to the Engineer-in-Charge.
- 35.1.3. Within 30 (thirty) days of issuing a notice pursuant to Clause 35.1.1, the Contractor shall send to the Engineer-in-Charge an account, giving detailed particulars of the amount and basis of the claim.
- 35.1.4. If the Contractor fails to comply with this Clause 33, the Contractor shall not be entitled to claim any additional payment.
- 35.1.5. Notwithstanding anything to the contrary in this Contract, EIL shall not be liable for any claim arising out of or in connection with the Contract or the execution of the Works, unless the Contractor shall have given notice of such claim within 60 (sixty) days from the date of issuance of the Completion Certificate.
- 35.1.6. The Contractor shall be entitled to additional costs as the Engineer-in-Charge considers due, after taking Approval from EIL. If the particulars supplied are insufficient to substantiate the whole of the claim, the Contractor shall be entitled to payment for such part of the claim as has been substantiated by the Engineer-in-Charge and agreed to by EIL.

35.2 Dispute Resolution

- 35.2.1. If any disagreement arises out of or in connection with the validity, application or interpretation of the Contract (the "Dispute"), the Parties shall endeavour in good faith to resolve the Dispute

through negotiation within 7 (seven) days of a written notice setting out the nature of such Dispute.

- 35.2.2. In the event that any Dispute is unable to be resolved between the Parties pursuant to Clause 35.2.1 within 21 (twenty-one) days of receipt of the notice under Clause 35.2.1, then such Dispute shall be referred to arbitration.
- 35.2.3. The arbitration will be conducted as per the Arbitration Act. The arbitral tribunal shall comprise of a sole arbitrator whom shall be appointed by EIL. The place of arbitration for any Disputes and Related Disputes shall be Delhi (save and except where otherwise specified under the Main Contract for the Related Dispute, in which event the place of arbitration shall be the place of arbitration for such Related Dispute). The language to be used in the arbitral proceedings shall be English. The arbitral award shall be final and binding upon both the Parties.
- 35.2.4. Responsibility of payment for all costs of arbitration, excepting counsel fees, shall be as per the arbitration award.
- 35.2.5. While any Dispute under this Contract is pending; and except where this Contract has been terminated in accordance with the terms of this Contract, the Parties shall continue to perform all of their respective obligations under this Contract without prejudice to the final determination in accordance with the provisions under this Clause 35.
- 35.2.6. Where, in EIL's absolute discretion, it is beneficial for the completion of the Facility for any Dispute between EIL and the Contractor, in respect of which an arbitration notice has been given, to be resolved in the same arbitration proceedings as a dispute between EIL and any other party or parties engaged in relation to the completion of the Facility (the “**Related Dispute**”) then:
- (a) if a notice to concur in the appointment of an arbitrator has been served in the Related Dispute, the Contractor hereby agrees that, at EIL's sole option, the Dispute between EIL and the Contractor shall be referred to the arbitrator appointed or to be appointed in respect of the Related Dispute and be determined at the same time as such Related Dispute;
 - (b) where an arbitrator has already been appointed in connection with the Related Dispute, the Contractor hereby agrees that, at EIL's sole option, the Dispute between EIL and the Contractor shall be referred to and be determined by the arbitrator so appointed contemporaneously with the Related Dispute.

35.3 Settlement of dispute between Govt. Dept./ Public Sector Undertaking

- 35.3.1 If the Contractor is a PSU or Enterprise or is a Govt. Department, any disputes or differences between the Contractor and EIL hereto arising out of any notified claim of the Contractor in terms hereof and/or arising out of any amount claimed by EIL (whether or not the amount claimed by EIL or any part thereof shall have been deducted from the final bill of the Contractor or any amount paid by EIL to the Contractor in respect of the work), then in suppression of the provisions of clause no 35.2 of the General Conditions of Contract, the following provisions shall apply, namely; such disputes or differences shall be resolved amicably by mutual consultation or through the good offices or empowered agencies of the Government. If such resolution is not possible, then the unresolved disputes or differences

shall be referred to arbitration of an arbitrator to be nominated by the Secretary, Department of legal affairs (Law Secretary) in terms of the Office Memorandum No. **DPE/4(10)/2001-PMA-GL-I dated 22nd January, 2004** issued by the Cabinet Secretariat (Department of Cabinet Affairs) as modified from time to time. The Arbitration Act shall not be applicable to the arbitrator under this clause. The award of the arbitrator shall be binding upon parties to the dispute, provided, however any party aggrieved by such award may make a further reference for setting aside or revision of the award to Law Secretary whose decision shall bind the parties finally and conclusively. The parties to the dispute will share equally the cost of arbitration as intimated by the arbitrator.

35.3.2 Notwithstanding the existence of any dispute or arbitration in terms hereof or otherwise, the Contractor shall continue and be bound to continue and perform the Works to completion in all respects according to the Contract (unless the Contract or Works be determined by EIL) and the Contractor shall remain liable and bound in all respects under the Contract.

36 MISCELLANEOUS

36.1 Personal Acts and Liabilities

- (a) No director, officer or other employee of EIL shall in any manner be personally bound or liable to the Contractor for acts, commissions or obligations of EIL under the Contract or otherwise or be personally answerable to the Contractor for any default or omission in the performance of any act(s), deed(s) or things to be observed and/or performed by EIL under the Contract.
- (b) The Contractor shall not be entitled to any increase in the rate(s) mentioned in the Price Schedule or to any other payment by reason of any representation, explanation or assurance given or alleged to have been given by the Engineer-in-Charge or any employee, representative, consultant or agent of EIL.
- (c) No director, officer or other employee of EIL shall be personally liable to the Contractor for any representation, explanation, statement or assurance given or alleged to have been given by him to the Contractor in connection with the Contract.
- (d) The Contractor shall not, under any circumstances, pay or advance to any officer(s), servant(s) or agent(s) of EIL any money on any account without the prior Approval of EIL and any payment without such Approval shall be entirely at the risk of the Contractor and EIL shall have no liability in this regard.
- (e) Any money paid to any director, attorney, agent, officer or employee of the Contractor and any receipt, settlement, acknowledgement of liability or other arrangement, agreement or document whatsoever signed by any such director, attorney, agent, officer or employee of the Contractor or erstwhile director, attorney, agent, officer or employee (without notice of his cessation of interest) or by any person held to be a director, attorney, agent, officer or employee of the Contractor authorised to act on behalf of the Contractor shall, as between the Contractor and EIL, be binding upon the Contractor and shall constitute a full release and discharge to EIL and/or a valid settlement, acknowledgement of obligation of the Contractor, as the case may be.

- (f) Any money paid to or dealing had with any partner or member of the Contractor (if a firm or consortium) and any receipt, settlement, acknowledgement of liability or other arrangement, agreement or document whatsoever signed by any one of the partners of the firm or members of the consortium or erstwhile partner of the firm or member of the consortium (without notice of the cessation of his interest) or with any person held to be a partner of the firm or member of the consortium shall be binding on the Contractor and shall constitute a full release and discharge to EIL and/or a valid settlement, acknowledgement of obligation of the Contractor, as the case may be, provided that EIL shall always have the right to call upon all or any of the partners/members of the Contractor's firm/consortium to sign any receipt, settlement, acknowledgement or other document and all or any of the partners of the firm or members of the consortium shall, when called upon to do so by EIL, immediately sign the receipt, settlement, acknowledgement or other document required to be so signed.

36.2 Assignment

The Contractor shall not assign, novate or charge the whole or any part of the Contract or create any encumbrance over the Facility, without the prior written consent of EIL. In the event of an assignment or novation by the Contractor, any stamp duty and all costs and expenses payable in respect of such documents, required to be signed by EIL, shall be to the account of the Contractor. EIL shall be entitled to assign and/or transfer its rights and obligations under the Contract to any party, without requirement of any further consent of the Contractor.

36.3 Partnership

Nothing contained or implied in Contract shall constitute or be deemed to constitute a partnership or agency between the Parties and none of the Parties shall have any authority to bind, commit or make any representations on behalf of the other Party.

36.4 Severability

If any provision of the Contract shall be determined to be invalid, illegal or unenforceable under Applicable Laws, all other provisions of the Contract shall continue in full force and effect unless such invalidity or unenforceability adversely affects the underlying intent of the Contract or unless the invalid or unenforceable provision comprises an integral part of, or is inseparable from the remainder of the Contract. In such circumstances the Parties shall negotiate in good faith with a view to agreeing upon one or more provisions which may be substituted for such invalid, illegal or unenforceable provisions, as nearly as is practicable. Provided failure to agree upon any such provisions shall not be subject to dispute resolution under this Contract or otherwise.

36.5 Entire Agreement

The Contract contains all covenants stipulations and provisions agreed by the Parties, and constitutes the entire Contract between the Parties hereto and supersedes any oral or written representations, understandings, proposals, or communications heretofore entered into by or on account of the Parties and may not be changed, modified, or amended except in writing and signed by the Parties hereto.

36.6 Reservation of Rights

No forbearance, indulgence, relaxation or inaction by EIL at any time to require performance of any of the provisions of the Contract shall in any way affect, diminish or prejudice the right of EIL to require performance of that provision, and no delay in exercising or omission to exercise any right, power or remedy accruing to EIL upon any default or otherwise under the Contract shall impair any such right, power or remedy or shall be construed to be a waiver thereof or any acquiescence in such default, nor shall the action or inaction of EIL in respect of any default or any acquiescence by it in any default, affect or impair any right, power or remedy of EIL in respect of any other default.

36.7 Abnormally High Rates (AHR items)

In item rate contract where the quoted rates for the items exceed 50% (fifty percent) of the EIL's estimated rates, such items will be considered as Abnormally High Rates Items (AHR) and payment of AHR items beyond the contracted quantities shall be made at the lower of the following rates:

- (a) Rates as per the Schedule of Rates, quoted by the Contractor.
- (b) Rate of the item, derived as follows:
 - (i) Based on rates of machine and labour as available from the Contract (which includes Contractor's supervision, profit, overheads and other expenses).
 - (ii) In case rates are not available in the Contract, rates will be calculated based on prevailing market rates of machine/equipments, material and labour plus 15% (fifteen percent) to cover Contractor's supervision profit, overhead & other expenses.

36.8 Corrupt and Fraudulent Practices

36.8.1 Bidders are required to furnish the complete and correct information/ documents required for evaluation of their bids. If the information/ documents forming basis of evaluation is found to be false/ fake/ forged, the same shall be considered adequate ground for rejection of the bids and forfeiture of earnest money deposit.

36.8.2 EIL requires that the Contractor observes the highest standard of ethics during the execution of Contract. In pursuance of this policy, EIL defines, for the purposes of this provision, the terms set forth below as follows:

- (a) "Corrupt Practice" means the offering, giving, receiving, or soliciting of anything of value to influence the action of public official in contract execution; and
- (b) "Fraudulent Practice" means a misrepresentation of facts in order to influence the execution of a Contract to the detriment of EIL, and includes collusive practice among bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive EIL of the benefits of free and open competition.
- (c) "False/Fake" means to make or construct falsely. "Faked alibi" is a made, manufactured, or false alibi. Something that is not what is purports to be; counterfeit, an imposter.
- (d) "Forgery" means the false making or the material altering of a document with the intent to defraud. A signature of a person that is made without the person's consent and without the person otherwise authorizing it. A person is guilty of forgery if, with the

purpose to defraud or injure anyone or with knowledge that he is facilitating a fraud or injury to be perpetrated by anyone, the actor (i) alters any writing of another without his authority (ii) makes, completes, authenticates, executes, issues or transfers any writing, so that it purports to be the act of another who did not authorize that act or to have been executed at a time or place or in a numbered sequence other than was in fact the case, or to, be a copy of an original when no such original exists. Utters any writing which he knows to be false in a manner specified in (i) & (ii) above.

- 36.8.3 EIL may terminate the Contract if it discovers subsequently that the Contractor had engaged in Corrupt Practices, or Fraudulent Practices in competing for the Contract.
- 36.8.4 The Contractor is required to execute the “Integrity Pact” attached in the Bid Document as a condition precedent to execution of the Contract.
- 36.8.5 In case, the information/ document furnished by the Contractor forming basis of evaluation of its Bid is found to be false / fake/ forged after the award of the Contract, EIL shall have the right to terminate the Contract and get the remaining Works executed by a third party at the risk & Cost of the Contractor and without any prejudice to other rights available to EIL under the Contract such as forfeiture of the Contract Performance Bank Guarantee, withholding of payment etc.
- 36.8.6 In case, this issue of submission of false/fake documents comes to the notice after execution of the Works, EIL shall have full right to forfeit any amount due to the Contractor along with forfeiture of the Contract Performance Bank Guarantee furnished by the Contractor.
- 36.8.7 Further, any Contractor which is found guilty of any Corrupt or Fraudulent Practice or submission of false/fake /forged documents, shall be put on the negative/ holiday list of EIL debarring them from future business with EIL.

36.9 Integrity Pact

The Integrity Pact forming a part of the Bidding Document, duly signed by the authorized person(s) of EIL and the Contractor, will form part of the Contract. If the Contract has been terminated according to provisions of the Integrity Pact, or, if EIL is entitled to terminate the Contract according to provisions of Integrity Pact, EIL shall be entitled to demand and recover from Contractor an amount specified in the Integrity Pact, which amount may be recovered by forfeiting the Contract Performance Bank Guarantee.

36.10 Liability of Government of India

- (a) It is expressly understood that Govt. of India is not a party to this Contract and has no liability, obligations or rights hereunder. It is expressly understood that EIL is an independent legal entity with power and authority to enter into the Contract solely on its behalf under the Applicable Laws and general principles of contract law.
- (b) The Contractor expressly agrees and acknowledges and understands that EIL is not an agent, representative or delegatee of Government of India.

36.11 Computerized Contractor's Billing System

Contractor should follow the following billing system:

- (a) The Running Bills will be prepared by the Contractor on their personal computers as per the standard formats and codification scheme proposed by EIL. The Contractor will be provided with data entry software to capture the relevant billing data for subsequent processing. The Contractor will submit these data to EIL in an electronic media along with the hard copy of the bill, necessary enclosures and documents. The Contractor will also ensure the correctness and consistency of data so entered with the hard copy of the bill submitted for payment.
- (b) EIL will utilize this data for processing and verification of the Running Bills of the Contractor.

36.12 Terms applicable to Consortium Contractors

Where the Contractor is a consortium, the lead member of the consortium shall represent the Contractor in all dealings with EIL and shall do all acts, deeds, matters and things required to be done by the Contractor under the Contract, including (but not limited to) exchange of correspondence, raising invoices, drawings, documents and receiving payments.

- (a) All dealings had with and/or all acts, deeds, matters and things and things done by or payments made to and invoices/documents drawn and/or negotiated by the lead member shall be binding upon the Contractor and each member of the consortium, and in so far as EIL shall require a discharge in respect of any dealing had or act, deed, matter or thing done or payment made as aforesaid, the same shall constitute a valid discharge to EIL.
- (b) Each and every member of the consortium shall be jointly and separately liable to EIL for and in respect of all liabilities obligations of the Contractor under the Contract.

The constitution of the Consortium or the relative distribution of the Work(s) and/or activities amongst the consortium members as approved by EIL shall not be altered or assigned, as the case may be except with the prior written consent of EIL and any contrary alteration or re-assignment shall be deemed to be an unauthorized assignment of the Contract with attendant liabilities including termination of the Contract.

36.13 Government Controlled Materials

In respect of all Government controlled or other scarce/imported materials in respect of which licenses, release orders, permits or authorizations have been granted in the name of EIL, the Contractor shall be deemed to be acting on behalf of EIL and as agent of EIL in respect of deliveries taken by the Contractor against any licences, release orders, permits, or authorizations issued in the name of EIL for Government controlled materials. The ownership in such materials shall (without prejudice to the responsibility/liability of the Contractor in respect thereof as set out in the various conditions hereof) vest in EIL from the point of time when it would have ordinarily vested in EIL on a direct delivery to EIL.

36.14 Distinction Between Foundation and Superstructure

To distinguish between work in foundations and superstructures, the following criteria shall apply:

- (b) For all equipment pedestals, pipe racks, other foundation and R.C.C. Structures, work done upto 300 mm level above finished grade level will be taken as work in foundations and work above this level will be treated as work in superstructures and payments would be made accordingly.
- (c) For buildings only, all works up to plinth level corresponding to finished floor level shall be treated as 'work in foundation' and all works above the finished floor level shall be treated as "work in superstructure".
- (d) Irrespective of what has been stated above, all pavements, R.C.C. retaining wall, all pipe sleepers and any similar item would be taken as work done in foundations irrespective of locations, nomenclature and levels given anywhere.
- (e) Where not specifically pointed out all works in cellars/ sumps, tank pads, cable trenches, or such similar item would be taken as work in foundation.

36.15 Excavation by Blasting

The Contractor shall obtain licence from the relevant Authorities for undertaking blasting work as well as for obtaining and storing the explosive as per Explosive Rules 2008 (as made under the Explosives Act, 1884), as amended from time to time. The Contractor shall purchase the explosives, fuses, detonators etc. only from a licensed dealer and shall be responsible for the safe custody and proper accounting of the explosive materials. The Engineer-in-Charge and his authorized representative shall have access to check the Contractor's store of explosives and its accounts. In case where the explosives are required to be transported and stored at Site, relevant clauses of the Explosives Rules 2008 as amended subsequently shall apply. The Contractor shall be responsible for any accident to workman, public or property, due to blasting operations.

36.16 Import Licence

Contractor shall arrange for the import of all materials required for permanent incorporation in the Works as well as construction equipment as per the guidelines laid down by the Government of India. EIL shall not provide import licence.

36.17 Retired Government or Company Directors

No Director of EIL is allowed to tender for a contract to be awarded by EIL for a period of 2 (two) years after his retirement from the employment of EIL, without the previous permission of EIL. The Contract if awarded is liable to be cancelled if the Contractor is found at any time to be such a person and has not obtained the permission of the EIL before submission of the tender. Any tender by a person aforesaid shall carry a disclosure thereof on the tender, and shall be accompanied by a copy of the document by which the requisite consent is given. Such disqualifications shall apply to every partner of a partnership firm.

36.18 Other Contractors

The Contractor agrees and acknowledges that that access to the Site and access routes thereto, has been granted to the Contractor on a non-exclusive basis, and that EIL, may at its sole discretion, grant access thereto, to other Persons (“**Other Contractors**”) to undertake thereon, any works other than those contemplated under the Contract. Further, the Contractor shall at all times undertake its works in such manner, as to not cause minimal disturbance to the Other Contractors, in the performance of the works allocated to such Other Contractors.³

36.19 Survival

The termination of the Contract shall not relieve the Contractor or EIL of any obligations hereunder which expressly or by implication survives termination. Further, except as otherwise provided in any provision of the Contract expressly limiting the liability of either Party, the termination of the Contract shall not relieve either Party of any obligations or liabilities for loss or damage to the other Party arising out of or caused by acts or omission of such Party prior to the effectiveness of such termination or arising out of such termination.



Appendix 1**FORM OF CONTRACT PERFORMANCE BANK GUARANTEE**

[ON APPROPRIATE STAMP PAPER]

Beneficiary: Engineers India Limited**Bank Guarantee No. [.....●]**

THIS DEED OF GUARANTEE is executed on this [.....insert day] day of [.....insert month and year] at [.....insert place] by [.....INSERT NAME OF BANK] having its head/registered office at [.....insert address], (hereinafter referred to as the "**Guarantor**", which expression shall unless it is repugnant to the subject or context thereof include successors and assigns)

IN FAVOUR OF:

ENGINEERS INDIA LIMITED, a public limited company incorporated under the Indian Companies Act, 1956, having its registered office at [.....], (hereinafter referred to as the "**EIL**", which expression shall unless it is repugnant to the subject or context thereof include successors and assigns).

WHEREAS

- A. EIL has entered into a Engineering, Procurement and Construction Contract dated [.....] (the "**Contract**") with [.....insert name of Contractor], a company incorporated under the Indian Companies Act, 1956 and having its registered office at [.....] (the "**Contractor**", which expression shall, unless it be repugnant to the context or meaning thereof, include its successors-in-title and permitted assigns), for the Project.
- B. In terms of the Contract, the Contractor is required to furnish to EIL, an unconditional, irrevocable, on demand bank guarantee for an amount equal to 10% of the Contract Price as security for due and punctual performance/discharge of the Contractor's obligations under the Contract for the Contract Validity Period.
- C. At the request of EIL and for sufficient consideration, the Guarantor has agreed to provide an unconditional, irrevocable and on-demand bank guarantee, for the due and punctual performance/discharge by the Contractor of its obligations under the Contract during the Contract Validity Period.

NOW THEREFORE THIS DEED WITNESSETH AS FOLLOWS:

- Capitalised terms used herein but not defined shall have the meaning ascribed to them in the Contract.
- The Guarantor hereby irrevocably and unconditionally guarantees and secures (as primary obligor and not merely as guarantor) to EIL the payment in full of all amounts at any time that

may be due, owing or payable to EIL from the Contractor for the failure of the Contractor to duly and punctually perform all of its obligations under the Contract (the "**Guarantee**"), without any demur, reservation, protest or recourse, immediately on receipt of a demand from EIL.

The Guarantee is given in consideration for consideration received from the Contractor (the receipt and sufficiency of which is hereby acknowledged).

The Guarantor agrees that the value of the Guarantee shall at all times be maintained at the amount of Rs. [.....*insert amount*] (the "**Guaranteed Amount**").

The Guarantor further agrees that this Guarantee does not limit the number of claims that may be made by EIL against the Guarantor. Upon a payment being made under this Guarantee, the amount of the Guarantee shall automatically be replenished to the full Guaranteed Amount.

Any payment made hereunder shall be made free and clear of and without deduction for, or on account of, any present or future Taxes, deductions or withholdings of any nature whatsoever and by whomsoever imposed, and where any withholding on a payment is required by any Applicable Law, the Guarantor shall comply with such withholding obligations and shall pay such additional amount in respect of such payment such that EIL receives the full amount due hereunder as if no such withholding had occurred.

3. The Guarantor shall, pay to EIL sums not exceeding the Guaranteed Amount, within 5 (five) Business Days of receipt of a written demand from EIL stating that the Contractor has failed to meet its performance obligations under the Contract. The Guarantor shall not be required to go into the veracity of any breach or failure on the part of the Contractor or validity of demand so made by EIL and shall pay the amount specified in the demand notwithstanding any direction to the contrary given or any dispute whatsoever raised by the Contractor or any other Person. The Guarantor's obligations hereunder shall subsist until all such demands are duly met and discharged in accordance with the provisions hereof.
4. The obligations of the Guarantor herein are absolute and unconditional, irrespective of the value, genuineness, validity, regularity or enforceability of the Contract or the insolvency, bankruptcy, reorganization, dissolution or liquidation of the Contractor or any change in ownership of the Contractor or any purported assignment by the Contractor or any other circumstance whatsoever which might otherwise constitute a discharge or defence of a guarantor or a surety.

Further, this Guarantee is in no way conditional upon any requirement that EIL first attempt to procure the Guaranteed Amount from the Contractor, or any other Person, or resort to any other means of obtaining payment of the Guaranteed Amount, prior to make any recourse to this Guarantee.

5. In order to give effect to this Guarantee, EIL shall be entitled to treat the Guarantor as the principal debtor. The obligations of the Guarantor under this Guarantee shall not be affected by any act, omission, matter or thing which, but for this provision, would reduce, release or prejudice the Guarantor from any of the Guaranteed Amount or prejudice or diminish the Guaranteed Amount in whole or in part, including (whether or not known to it, or EIL):
 - (a) any time or waiver granted to, or composition with, the Contractor or any other Person;

- (b) any incapacity or lack of powers, EIL or legal personality of or dissolutions, or insolvency, or bankruptcy, or change in the status of the Contractor or any other Person;
- (c) any variation of the Contract so that references to the Contract in this Guarantee shall include each variation;
- (d) any unenforceability, illegality or invalidity of any obligation of any Person under the Contract or any unenforceability, illegality or invalidity of the obligations of the Guarantor under this Guarantee or the unenforceability, illegality or invalidity of the obligations of any Person under any other document or guarantee, to the extent that each obligation under this Guarantee shall remain in full force as a separate, continuing and primary obligation, and its obligations be construed accordingly, as if there were no unenforceability, illegality or invalidity;
- (e) the partial or entire release of any Guarantor or other Person primarily or secondarily liable or responsible for the performance, payment or observance of any of the Contractor's obligations during the Construction Period; or by any extension, waiver, or amendment whatsoever which may release a guarantor or Guarantor (other than performance or indefeasible payment of a Guaranteed Amount); or
- (f) any part performance of the Contract by the Contractor or by any failure by EIL to timely pay or perform any of its obligations under the Contract.
6. If, and to the extent that, for any reason the Contractor enters or threatens to enter into any proceedings in bankruptcy or reorganization or otherwise, or if, for any other reason whatsoever, the performance or payment by the Contractor of the Guaranteed Amount becomes or may reasonably be expected to become impossible, then the Guaranteed Amount shall be promptly paid by the Guarantor to EIL on demand.
7. So long as any sum remains owing by the Contractor to EIL, the Guarantor shall not exercise any right of subrogation or any other rights of a guarantor or enforce any guarantee or other right or claim against the Contractor (whether in respect of its liability under this Guarantee or otherwise) or claim in the insolvency or liquidation of the Contractor or any such other Person in competition with EIL. If the Guarantor receives any payment or benefit in breach of this Clause 7, it shall hold the same upon trust for EIL.
8. This Guarantee shall remain in full force and effect from the date hereof until the end of the Contract Validity Period i.e., up to midnight of {..... *insert date* } plus additional 90 days to enable claims to be made i.e., up to midnight of {..... *insert date* }, unless discharged/ released earlier by EIL in accordance with the provisions of the Contract. No claim made after such date shall be valid against the Guarantor.
- Notwithstanding the foregoing, this Guarantee shall continue in effect until the sums payable under this Guarantee have been indefeasibly paid in full and the Guarantor receives written notice thereof from EIL (such notice to be issued promptly upon such occurrence).
9. The Guarantor represents and warrants to EIL that:
- (a) it has the power to execute, deliver and perform the terms and provisions of this Guarantee and has taken all necessary action to authorize the execution, delivery and

performance by it of this Guarantee;

- (b) the Guarantor has duly executed and delivered this Guarantee, and this Guarantee constitutes its legal, valid and binding obligation enforceable in accordance with its terms except as the enforceability thereof may be limited by applicable bankruptcy, insolvency, moratorium or other similar laws affecting the enforcement of creditors' rights generally and by general equitable principles;
 - (c) neither the execution, delivery or performance by the Guarantor of this Guarantee, nor compliance by it with the terms and provisions hereof will: (i) contravene any material provision of any law, statute, rule or regulations or any order, writ, injunction or decree of any court or governmental instrumentality; (ii) conflict or be inconsistent with or result in any breach of any of the material terms, covenants, conditions or provisions of, or constitute a default under any agreement, contract or instrument to which the Guarantor is a party of by which it or any of its property or assets is bound; or (iii) violate any provision of the Guarantor's constituent documents; and
 - (d) no order, consent, approval, license, authorization or validation of, or filing, recording or registration with (except as have been obtained or made prior to the date hereof), or exemption by, any governmental or public body or EIL, or any subdivision thereof, is required to authorize, or is required in connection with: (i) the execution, delivery and performance of this Guarantee; or (ii) the legality, validity, binding effect or enforceability of this Guarantee.
10. This Guarantee is a continuing one and all liabilities to which it applies or may apply under the terms hereof shall be conclusively presumed to have been created in reliance hereon. No failure or delay on the part of EIL in exercising any right, power or privilege hereunder and no course of dealing between EIL and the Guarantor, or the Contractor, shall operate as a waiver thereof, nor shall any single or partial exercise of any right, power or privilege hereunder preclude any other or further exercise thereof or the exercise of any other right, power or privilege.
11. The rights, powers and remedies expressly provided in this Guarantee are cumulative and not exclusive of any rights, powers or remedies which EIL would otherwise have. No notice to or demand on the Guarantor in any case shall entitle the Guarantor to any other further notice or demand in similar or other circumstances or constitute a waiver of the rights of EIL to any other or further action in any circumstances without notice or demand.
12. If any one or more of the provisions contained in this Guarantee are or become invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby, and the Guarantor shall enter into good faith negotiations with EIL to replace the invalid, illegal or unenforceable provision.
13. The Guarantor hereby agrees to execute and deliver all such instruments and take all such actions as may be necessary to make effective fully the purposes of this Guarantee.
14. This Guarantee may be executed in one or more duplicate counterparts, and when executed and delivered by the Guarantor and EIL shall constitute a single binding agreement.
15. Any notice, request or other communication to be given or made under this Guarantee shall be

in writing addressed to the Guarantor at the location set opposite its signature hereto and in the manner as set out in respect of notices under the Contract.

16. This Guarantee shall be governed by, and construed in accordance with, the laws of India. The Guarantor irrevocably agrees that any legal action, suit or proceeding arising out of or relating to this Guarantee may be brought in the courts in Delhi.
17. EIL may assign or transfer all or any part of its interest herein to any other person with prior notification to the Guarantor. The Guarantor may not assign or transfer any of its rights or obligations under this Guarantee.

IN WITNESS WHEREOF the Guarantor has set its hands hereunto on the day, month and year first hereinabove written.

Signed and delivered by [.....insert name of Bank] Bank by hand

Name:

Designation:



Appendix 2
FORM OF MOBILIZATION ADVANCE GUARANTEE

[ON APPROPRIATE STAMP PAPER]

Beneficiary: Engineers India Limited

Bank Guarantee No. [.....●]

THIS DEED OF GUARANTEE is executed on this [.....insert day] day of [.....insert month and year] at [.....insert place] by [.....INSERT NAME OF BANK] having its head/registered office at [.....insert address], (hereinafter referred to as the "**Guarantor**", which expression shall unless it is repugnant to the subject or context thereof include successors and assigns)

IN FAVOUR OF

Engineers India Limited, a company incorporated under the (Indian) Companies Act, 1956, with its registered office at [.....■] (hereinafter referred to as the "**EIL**", which expression shall unless repugnant to the context thereof, be deemed to include its successors-in-interest and permitted assigns).

WHEREAS

- A. [.....■] with its registered office at [.....■] (hereinafter referred to as the "**Contractor**", which expression shall unless repugnant to the context thereof, be deemed to include its successors-in-interest and permitted assigns) has been awarded a contract by EIL for [the engineering, procurement, construction, testing and commissioning] of the Facility ("**Contract**").
- B. In terms of Clause 9.4.1 of the Contract, Contractor is required to furnish a Mobilization Advance Guarantee to EIL in the form of an unconditional, irrevocable, on demand bank guarantee for securing the Mobilization Advance made to Contractor in accordance with the Contract ("**Mobilization Advance Guarantee**") for INR [.....insert amount] or US\$ [.....insert amount] ("**Guaranteed Amount**").
- C. At the request of the Contractor and for sufficient consideration, the Guarantor has agreed to issue this guarantee in favour of EIL.

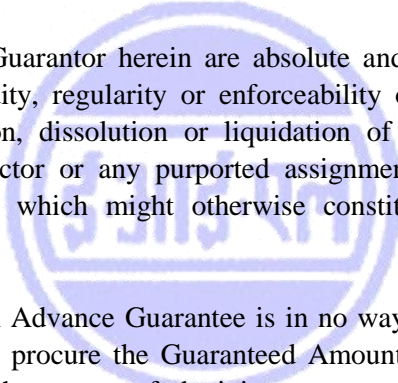
NOW THEREFORE THIS DEED WITNESSETH AS FOLLOWS:

1. Capitalised terms used herein but not defined shall have the meaning ascribed to them in the Contract.
2. The Guarantor shall upon a written demand from EIL informing the Guarantor that the Mobilization Advance made to the Contractor has not been adequately adjusted, pay to EIL, within 5 (five) days of receipt of such written demand from EIL, without further proof or conditions and without contest, recourse, demur or protest and without any enquiry to EIL or the Contractor, forthwith and in full amount, without any deductions or set off or counter

claims whatsoever, the sum claimed by EIL in such demand not exceeding an amount equivalent to the Guaranteed Amount. The Guarantor will pay the amount specified in the demand notwithstanding any direction to the contrary given or any dispute raised by the Contractor or any other person.

The Guarantor agrees that this Mobilization Advance Guarantee does not limit the number of claims that may be made by EIL against the Guarantor provided that such claims taken together shall not exceed the Guaranteed Amount.

Any payment made hereunder shall be made free and clear of and without deduction for, or on account of, any present or future Taxes, deductions or withholdings of any nature whatsoever and by whomsoever imposed, and where any withholding on a payment is required by any Applicable Law, the Guarantor shall comply with such withholding obligations and shall pay such additional amount in respect of such payment such that EIL receives the full amount due hereunder as if no such withholding had occurred.

3. This Mobilization Advance Guarantee shall be a continuing guarantee during its currency and shall remain in force and effect until the earlier of: (i) date when the Mobilization Advance has been fully recovered; and (ii) [.....insert date], upon which the obligations of the Guarantor under this Mobilization Advance Guarantee shall stand discharged.
 4. The obligations of the Guarantor herein are absolute and unconditional, irrespective of the value, genuineness, validity, regularity or enforceability of the Contract or the insolvency, bankruptcy, reorganisation, dissolution or liquidation of the Contractor or any change in ownership of the Contractor or any purported assignment by the Contractor or any other circumstance whatsoever which might otherwise constitute a discharge or defence of a guarantor or a surety.

- Further, this Mobilization Advance Guarantee is in no way conditional upon any requirement that EIL first attempts to procure the Guaranteed Amount from the Contractor or any other person, or resort to any other means of obtaining payment of the Guaranteed Amount, prior to making recourse to this Guarantee.
5. The Guarantor shall not be required to go into the veracity of any breach or failure on the part of the Contractor or validity of demand so made by EIL and shall pay the amount specified in the demand notwithstanding any direction to the contrary given or any dispute whatsoever raised by the Contractor or any other Person. The Guarantor's obligations hereunder shall subsist until all such demands are duly met and discharged in accordance with the provisions hereof.
 6. The Guarantor hereby agrees that its liability under this Mobilization Advance Guarantee shall not be discharged by virtue of any agreement between the Contractor and EIL, whether with or without the Guarantor's knowledge, or by reason of EIL showing any indulgence or forbearance to the Contractor.
 7. The Guarantor's obligations under this Mobilization Advance Guarantee for the Guaranteed Amount is primary, independent and absolute and not by way of surety only.
 8. The obligations of the Guarantor under this Mobilization Advance Guarantee shall not be affected by any act, omission, matter or thing which, but for this provision, would prejudice or

diminish the Guaranteed Amount in whole or in part, including (whether or not known to it or EIL):

- (a) any time or waiver granted to, or composition with, the Contractor or any other person;
- (b) any incapacity or lack of powers, authority or legal personality of or dissolutions, or insolvency or bankruptcy, or change in the status of the Contractor or any other Person;
- (c) any variation of the Contract so that references to the Contract in this Mobilization Advance Guarantee shall include each variation;
- (d) any unenforceability, illegality or invalidity of any obligation of any person under the Contract or any unenforceability, illegality or invalidity of the obligations of the Guarantor under this Mobilization Advance Guarantee or the unenforceability, illegality or invalidity of the obligations of any person under any other document or guarantee, to the extent that each obligation under this Mobilization Advance Guarantee shall remain in full force as a separate, continuing and primary obligation, and its obligations be construed accordingly, as if there were no unenforceability, illegality or invalidity;
- (e) any extension, waiver, or amendment whatsoever which may release a guarantor or the Guarantor (other than performance or indefeasible payment of a Guaranteed Amount); or
- (f) any part performance of the Contract by the Contractor or by any failure by EIL to timely pay or perform any of its obligations under the Contract.

9. So long as any sum remains owing by the Contractor to EIL, the Guarantor shall not exercise any right of subrogation or any other rights of a guarantor or enforce any guarantee or other right or claim against the Contractor (whether in respect of its liability under this Mobilization Advance Guarantee or otherwise) or claim in the insolvency or liquidation of the Contractor or any such other person in competition with EIL. If the Guarantor receives any payment or benefit in breach of this Clause, it shall hold the same in trust for EIL.

10. The Guarantor represents, warrants and undertakes to EIL that:

- (a) it has the power to execute, deliver and perform the terms and provisions of this Mobilization Advance Guarantee and has taken all necessary action(s) to authorize the execution, delivery and performance by it of this Mobilization Advance Guarantee;
- (b) the Guarantor has duly executed and delivered this Mobilization Advance Guarantee, and this Mobilization Advance Guarantee constitutes its legal, valid and binding obligation enforceable in accordance with its terms except as the enforceability thereof may be limited by applicable bankruptcy, insolvency, moratorium or other similar laws affecting the enforcement of creditors' rights generally and by general equitable principles;
- (c) neither the execution, delivery or performance by the Guarantor of this Mobilization Advance Guarantee, nor compliance by it with the terms and provisions hereof will: (i) contravene any material provision of any law, statute, rule or regulations or any order, writ, injunction or decree of any court or governmental instrumentality; (ii) conflict or be inconsistent with or result in any breach of any of the material terms, covenants, conditions or provisions of, or constitute a default under any agreement, contract or instrument to which the Guarantor is a party or by which it or any of its property or assets is bound; or (iii) violate any provision of the Guarantor's constituent documents;

- (d) no order, consent, approval, license, authorization or validation of, or filing, recording or registration with (except as have been obtained or made prior to the date hereof), or exemption by, any governmental or public body or authority, or any subdivision thereof, is required to authorize, or is required in connection with: (i) the execution, delivery and performance of this Mobilization Advance Guarantee; or (ii) the legality, validity, binding effect or enforceability of this Mobilization Advance Guarantee; and
- (e) this Mobilization Advance Guarantee will be enforceable when presented for payment to a Scheduled Bank (as defined by the Reserve Bank of India Act, 1934) in [.....*Insert name of place*].
11. This Mobilization Advance Guarantee is a continuing one and all liabilities to which it applies or may apply under the terms hereof shall be conclusively presumed to have been created in reliance hereon. No failure or delay on the part of EIL in exercising any right, power or privilege hereunder and no course of dealing between EIL and the Guarantor, or the Contractor, shall operate as a waiver thereof, nor shall any single or partial exercise of any right, power or privilege hereunder preclude any other or further exercise thereof or the exercise of any other right, power or privilege.
12. If any one or more of the provisions contained in this Mobilization Advance Guarantee are or become invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby, and the Guarantor shall enter into good faith negotiations with EIL to replace the invalid, illegal or unenforceable provision.
13. The Guarantor hereby agrees to execute and deliver all such instruments and take all such actions as may be necessary to make effective fully the purposes of this Mobilization Advance Guarantee.
14. This Mobilization Advance Guarantee may be executed in one or more duplicate counterparts, and when executed and delivered by the Guarantor and EIL shall constitute a single binding agreement.
15. Any demand, notice, request or other communication to be given or made under this Mobilization Advance Guarantee shall be deemed to have been duly given or served:
- (i) Upon EIL, at [.....*insert address*] marked for the attention of [.....*insert name*];
- (ii) Upon a Scheduled Bank (as defined by the Reserve Bank of India Act, 1934), at [.....*insert*], India.
16. The Guarantor:
- (a) acknowledges that the Lenders will review this Mobilization Advance Guarantee and may require changes thereto as a condition of granting financing and/or providing political risk insurance; and
- (b) shall consider any such requirements in good faith.

17. This Mobilization Advance Guarantee shall be governed by, and construed in accordance with, the laws of India. The Guarantor irrevocably agrees that any legal action, suit or proceeding arising out of or relating to this Mobilization Advance Guarantee may be brought in the courts in Delhi.
18. EIL may assign or transfer all or any part of its interest herein together with the Contract to any other person with prior intimation to the Guarantor. The Guarantor may not assign or transfer any of its rights or obligations under this Mobilization Advance Guarantee.

IN WITNESS WHEREOF the Guarantor has set its hands hereunto on the day, month and year first hereinabove written.

Signed and delivered by [.....insert name of Guarantor] Guarantor by hand

Name:

Designation:



Appendix 3
SAFETY CODE
[To be inserted]

1. GENERAL

- 1.1 The CONTRACTOR shall adhere to safe construction practices and guard against hazardous and unsafe working conditions and shall comply with EIL's safety rules as set forth herein.
- 1.2 In addition, the CONTRACTOR shall adhere to and be bound by the "Safety Practices during Construction" (OISD-GDN-192 and OISD-207) formulated by the Oil Industry Safety Directorate from time to time. A copy of the existing "Safety Practices During Construction" as presently formulated by the Oil Industry Safety Directorate is annexed hereto as Appendix III
- 1.3 In the event of any irreconcilable conflict between the "Safety Practices during Construction" prescribed by the Oil Industry Safety Directorate and the Safety provisions set out herein, the "Safety Practices during Construction" established by the Oil Industry Safety Directorate shall prevail to the extent of the irreconcilable conflict.
- 1.4 In this Section any reference to the Facility shall wherever applicable include any existing plant, unit or installation in or adjacent to which the Site or any part thereof is located.

2. FIRST AID AND INDUSTRIAL INJURIES

- 2.1 The Contractor shall maintain first aid facilities for its employees and those of its sub-contractors.
- 2.2 The Contractor shall make outside arrangements for ambulance service and for the treatment of industrial injuries. Names of those providing these services shall be furnished to the Engineer-in-Charge prior to start of construction, and their telephone numbers shall be prominently posted in Contractor's field office.
- 2.3 All critical industrial injuries shall be reported promptly to the Engineer-in-Charge, and a copy of Contractor's report covering each personal injury requiring the attention of a physician shall be furnished to EIL.

3. GENERAL RULES

Carrying/Striking of matches, lighters within the Site, smoking within the Site, tank, farm, or dock limits are strictly prohibited. Violators of the "No Smoking" rules shall be discharged immediately. Within the operation area, no hot work shall be permitted without valid gas safety/fire permits. The Contractor shall be held liable and responsible for all lapses of his subcontractors/employees in this regard.

4. CONTRACTOR'S BARRICADES

- 4.1 The CONTRACTOR shall erect and maintain barricades required in connection with his operation to guard or protect:
- (i) Excavation
 - (ii) Hoisting areas
 - (iii) Areas adjudged hazardous by the Contractor's or EIL's inspectors.
 - (iv) EIL's existing property liable to damage by Contractor's operations, in the opinion of Engineer-in-Charge.
 - (v) Railroad unloading spots.
- 4.2 The Contractor's employees and those of its sub-contractors shall become acquainted with EIL's barricading practices and shall respect the provisions thereof.
- 4.3 Barricades and hazardous areas adjacent to but not located in normal routes of travel shall be marked by red flasher lanterns at nights.

5. SCAFFOLDING

- 5.1 Suitable scaffolding shall be provided for workmen for all works that cannot safely be done from the ground or from solid construction except such short period work as can be done safely from ladders. When a ladder is used, an extra person shall be engaged for holding the ladder and if the ladder is used for carrying materials as well, suitable footholds and handholds shall be provided on the ladder and the ladder shall be given an inclination not steeper than 1 in 4 (1 horizontal 4 vertical).
- 5.2 Scaffolding or staging more than 12' (twelve feet) above the ground floor, swung or suspended from an overhead support or erected with stationary support shall have a guard rail properly attached, bolted, braced and otherwise rewinded at least 3' high above the floor or platform of scaffolding or staging and extending along the entire length of the outside and ends thereof with only such openings as may be necessary for the delivery of materials. Such scaffolding or staging shall be so fastened as to prevent it from swaying from the building or structure.
- 5.3 Working platforms, 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' above ground level or floor level, they should be closely boarded, should have adequate width and should be suitably fastened as described in Clause 5.2 above.
- 5.4 Every opening in the floor of a building or in a working platform shall be provided with suitable fencing or railing whose minimum height shall be 3 feet to prevent the fall of persons or materials by providing.
- 5.5 Safe means of access shall be provided to all working platforms and other working places. Every ladder shall be securely fixed. No portable single ladder shall be over 30' in length while the width between the side rails in rung ladder shall in no case be less than 11.5" for ladder up to and including 10' in length. For longer ladders this width would be increased by at least ¼" for each additional foot of length. Uniform step spacing shall not exceed 12". Adequate precautions shall be taken to prevent danger from electrical equipment. No materials on any site of work shall be so stacked or placed as to cause danger or inconvenience to any person or public. The Contractor shall also provide all necessary fencing and lights to protect the workers

and staff from accidents, and shall be bound to bear the expenses of defense of every suit, action or other proceedings, that may be brought by any person for injury sustained owing to neglect of the above precautions and to pay damages and costs which may be awarded in any such suit or action or proceedings to such person, or which may with the consent of the Contractor be paid to compromise any claim by any person.

6. EXCAVATION AND TRENCHING

- 6.1 All trenches 4' (Four feet) or more in depth, shall at all times be supplied with at least one ladder for each 100' length or fraction thereof.
- 6.2 The Ladder shall be extended from bottom of the trench to at least 3' 3" above the surface of the ground. The site of the trenches which is 5' (Five feet) 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. Cutting shall be done from top to bottom. Under no circumstances shall undermining or undercutting be done.

7. DEMOLITION

- 7.1 Before any demolition work is commenced and also during the process of such works all roads and open areas adjacent to the Site shall either be closed or suitably protected.
- 7.2 No electric cable or apparatus which is liable to be a source of danger over a cable or apparatus used by the operator shall remain electrically charged.
- 7.3 All practical steps shall be taken to prevent danger to persons employed, from risk of fire or explosion or flooding. No floor or other part of the building shall be so overloaded with debris or material as to render it unsafe.

8. SAFETY EQUIPMENT

- 8.1 All necessary personal safety equipment as considered adequate by the Engineer-in-Charge should be made available for the use to 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.
- 8.2 Workers employed on mixing asphaltic materials, cement and lime mortars shall be provided with protective footwear and protective gloves.
- 8.3 Those engaged in white washing and mixing or stacking of cement bags or any materials which are injurious to the eyes shall be provided with protective goggles.
- 8.4 Those engaged in welding and cutting works shall be provided with protective face and eye-shields, and gloves, etc.
- 8.5 Stone breakers shall be provided with protective goggles and protective clothing and seated at sufficiently safe intervals.
- 8.6 When workers are employed in sewers and manholes, which are in use, the Contractor shall ensure that the manhole covers are opened and are ventilated at least for an hour before the

workers are allowed to get into the manholes, and the manholes so opened shall be cordoned off with suitable railing and provided with warning signals or boards to prevent accident.

8.7 The Contractor shall not employ men below the age of 18 years and women on the work of painting or products containing lead in any form. Wherever men above the age of 18 years are employed on the work of lead painting, the following precautions should be taken:

- (a) No paint containing lead product shall be used except in the form of paste or readymade paint.
- (b) Suitable face masks shall be supplied for use by the workers when paint is applied in the form of spray or if a surface having lead paint dry rubbed and scrapped.
- (c) Overalls shall be supplied by the Contractor to workmen and adequate facilities shall be provided to enable the working painters to wash during and on cessation of Work.

9. RISKY PLACES

When the work is done near any place where there is a risk of drowning, all necessary safety equipments shall be provided and kept ready for use and all necessary steps taken for prompt rescue of any person in danger and adequate provision should be made for prompt first aid treatment of all injuries likely to be sustained during the course of the work.

10. HOISTING EQUIPMENT

Use of hoisting machines and tackle including their attachments, anchorage and supports shall conform to the following standards or conditions:

- (a) These shall be of good mechanical construction, sound materials and adequate strength and free from patent defect and shall be kept in good condition and in good working order.
- (b) Every rope used in hoisting or lowering materials or as a means of suspension shall be of durable quality and adequate strength and free from patent defects.
- (c) Every crane driver or hoisting 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 scaffolding winch or to give signals to the operator.
- (d) In case of every hoisting machine and of every chain, ring, hook, shackle, swivel and pulley block used in hoisting or lowering or as a means of suspension, the safe working load shall be ascertained by adequate means.
- (e) Every hoisting machine and all gear referred to above shall be plainly marked with the safe working load and 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 loaded beyond the safe working load except for the purpose of testing.
- (f) In case of departmental machines, the safe working load shall be notified by the Engineer-in-Charge. As regards Contractor's machines, the Contractor shall notify the safe working load of the machine to the Engineer-in-Charge, whenever he brings any machinery to Site of work and get it verified by the Engineer-in-Charge concerned.

11. ELECTRICAL EQUIPMENT

Motor, Gearing, Transmission, wiring and other dangerous parts of hoisting appliances shall be provided with efficient safeguards. Hoisting appliances should be provided with such means as will reduce to the minimum, the risk of accidental descent of the load. Adequate precautions shall be taken to reduce to the minimum the risk of any part of a suspended load becoming accidentally displaced. When workers are employed on electrical installations which are already energized, insulating mats, wearing apparel, such as gloves and boots as may be necessary shall be provided. The workers shall not wear any rings, watches and carry keys or other materials which are good conductors of electricity.

12. MAINTENANCE OF SAFETY DEVICES

All scaffolds, ladders and other safety devices mentioned or described herein shall be maintained in safe conditions and no scaffold, ladder or equipment shall be altered or removed while it is in use. Adequate washing facilities should be provided at or near the place of work.

13. DISPLAY OF SAFETY INSTRUCTIONS

These safety provisions should be brought to the notice of all concerned by display on a notice board at a prominent place at the Site. The person responsible for compliance of the safety code shall be named therein by the CONTRACTOR.

14. ENFORCEMENT OF SAFETY REGULATIONS

To ensure effective enforcement of the rules and regulations relating to safety precautions, the arrangements made by the Contractor shall be open to inspection by the Welfare Officer, Engineer-in-Charge or Safety Engineer of EIL or their representatives.

15. NO EXEMPTION

- 15.1 Notwithstanding anything provided in this Appendix 3, the Contractor shall be bound by the provisions of any other Act or rules in force in the Republic of India, with a view that the provisions hereof shall be in addition thereto and not in lieu thereof.
- 15.2 The works throughout including any temporary works shall be carried on in such a manner as not to interfere in any way whatsoever with the traffic on any roads or footpaths at the Site or in the vicinity thereof or with any existing works whether the property of EIL or of a third party.
- 15.3 The Contractor shall also arrange to obtain valid gate passes for his men and equipment from the concerned Authorities.
- 15.4 No man/material/equipment not covered by valid passes shall be permitted within the Site no material/equipment shall be permitted to be taken out of the Site, unless authorized by the concerned Authorities. The Contractor shall be held fully responsible for any or all delays/ losses/ damages that may result consequent on any lapse(s) that may occur on the part of his subcontractors/employees in this regard.

16. ENTRY PASSES

- 16.1 The CONTRACTOR has to apply for photo Entry Passes for his workers and staff and the workers and staff of his Sub-Contractors in a prescribed proforma provided by EIL. The Application shall be accompanied by a Statement and Declaration in the form prescribed by EIL signed by the employees for whom the Entry Passes are sought and confirmed by the employer. The photo Entry Passes shall be issued by EIL for a maximum period of 3 (three) months, which will be extendable upon the Contractor's application. As a special case, Temporary Passes may be issued for a maximum period of 7 (seven) days.
- 16.2 Unutilized/expired Entry Passes/Identity Cards shall have to be immediately surrendered to EIL.
- 16.3 In case of the loss of an Entry Pass/Identity Card, the Contractor shall immediately lodge an FIR with the local police station and inform the Engineer-in-Charge of the loss and shall pay a charge of Rs.150/- against Entry Pass/Identity Card lost. The Contractor is required to keep an account and track of all Entry Passes issued and surrendered.

Gate Passes/Identity Cards issued by the Security Section should always be displayed by the Contractor's or Sub-contractor's employees while working inside the Plant.

17. GATE PASSES

- 17.1 To bring materials, equipment, tools and tackle and other things inside the Site for construction Work, the Contractor has to produce proper documents of title or authority relative thereto for inspection by EIL's personnel at the gate. These shall be checked thoroughly by EIL's personnel at the Gate and recorded in their Register before permitting the same to be brought inside within the Site. It is the Contractor's responsibility to see that the entry is duly recorded in the Register with proper Entry Number, date and signature of EIL's authorized representative and that the supporting challans/documents are stamped and signed by EIL's personnel at the gate at the time of entry.

Those materials which need repairing/ replacement as per Site condition will be allowed to move beyond EIL's battery limit only after exchange of good equivalent material.

18. WORK PERMIT

- 18.1 In order to keep EIL informed of the various jobs being undertaken within the Site and to enable EIL to regulate the same to ensure the observance of safety regulations relative thereto, when Work is to be carried out in hazardous areas, a Hot Work Permit is to be obtained by the Contractor from EIL before start of Work on jobs which are capable of generating a flame, spark or heat e.g., gas cutting, grinding, welding, use of any electrical, diesel, petrol or battery operated prime mover, machine, tool or equipment or generator set, mixer machine, drilling machine, pump, crane, fork lift or hand truck or trailer or chipping or breaking of rocks or concrete or hacksaw cutting and drilling. Similarly the Contractor shall obtain a Cold Work Permit from EIL for jobs which do not come under the category of hot work and in respect of which there is no risk of fire, e.g., transportation, backfilling of ordinary soil by manual process, pile testing, hydro-testing, shuttering, fixing of reinforcement, hand mixed concreting, plastering and brickwork.
- 18.2 Depending on the nature of the Work and the equipments and tools involved, the Contractor

shall apply for Cold/Hot Permit in a prescribed format at least 7(seven) days before the Work is planned to start. No Work Permit shall be issued by EIL unless proper arrangement is made by the Contractor to ensure safe performance of the Work inside the Site limit. Job-wise and area-wise permits shall be issued to the Contractor and for Work against each permit the Contractor shall post at Site at least one Construction Supervisor and one Safety Supervisor of required level to ensure the due observance of all safety requirements.

19. VEHICLE PERMIT

Permits are to be obtained separately for entry/use of vehicles/trailers and other mobile equipment inside the Site limits. All the Contractor's vehicles should have a valid 'PUC Certificate'. The following requirements are to be met to obtain vehicle permit:

- (i) Vehicle/Equipment shall be in good condition and fitted with spark arrestor.
- (ii) Vehicles should carry, wherever applicable, valid Road Tax Certificate and Fitness Certificate from the competent authority and insurance policy.
- (iii) Valid operating/driving license of driver/operator.

20. VALIDITY OF THE PERMIT

- (i) Any Hot or Cold Work Permit issued is valid only for 24 hours.
- (ii) Thereafter the validity of the Permit must be renewed for each shift (morning & evening) by the shift in-charge/ shift representative of EIL.
- (iii) The permit may be renewed for a maximum period of one month from the date of issue and if extension is required, the Contractor has to apply for a fresh permit.
- (iv) A permit is not valid for Work on holidays unless special permission of EIL is obtained for the purpose.

21. SPECIAL SAFETY REGULATIONS

21.1 REGARDING WORK PERMIT

- (a) The Work shall be carried out inside the Site to conform to the EIL's safety section and in accordance with any instructions of the Engineer-in-Charge issued from time to time. Sometimes working hours may be drastically reduced or increased to satisfy safety requirements and the Contractor shall meet these requirements without any time and cost implications. No claim for idling of machinery, plant, manpower or equipment shall be entertained for reason of delay in the issue of a Work Permit and it shall be the exclusive responsibility of the Contractor to apply for, pursue and obtain the requisite Work Permit(s) well in advance of the relative requirement(s).
- (b) The Contractor shall abide by all safety regulations of the Plant and ensure that safety equipment for specific jobs as stipulated in the Factories Act Safety Handbook is issued to all employees during the execution of Work, failing which all the works at Site shall be suspended.
- (c) HSE specifications, OISD and other requirements shall be followed in totality.

21.2 REGARDING HOT WORK

- (a) When doing hot work inside the plant, the Contractor must ensure that the fire hose is

hooked up with the fire water system and extended to the Site. In addition, at least one fire extinguisher must be kept near the working spot. The area around and below the place of hot work must be adequately protected from sparks and hot metals by a booth made of asbestos cloth/sheet and by wetting with water. In addition, depending on the location and hazard of the work, the Contractor shall at its own Cost arrange sufficient number of additional fire hoses and such fire fighting equipment of approved quality as may be required to carry out hot job inside the plant.

- (b) Welding & electrical cables should be of approved quality and no jointing or loose connection shall be permitted.
- (c) At the end of the working day the Contractor must inform the electrical section to switch off power at sub-station end.
- (d) The Contractor must provide cotton clothes, safety shoes, safety helmet, safety belt, and hand gloves of approved quality to his workers to meet the safety requirement of various jobs to be carried out inside the Plant.

21.3 REGARDING USE OF VEHICLE

- (a) Vehicle must not ply on any road within the Site at a speed exceeding 20 KM/hr.
- (b) Mobile cranes, loaded trucks and trailers must not exceed the speed limit of 15 KM/hr inside the plant.
- (c) No crane is allowed to move inside the plant with load.
- (d) No vehicle is allowed to be parked inside the plant.
- (e) Limited number of vehicles will be permitted inside the battery area due to security reasons.

22. DEDUCTIONS FROM CONTRACT PRICE

- 22.1 In addition to price reduction and deductions as provided for, EIL shall be entitled to deduct from any payment due to the Contractor, any amount claimed by EIL under the Contract and any costs, damages or expenses for which the Contractor is liable under the Contract.
- 22.2 In addition to price reduction and deductions as provided for in the Contract, EIL shall be entitled to deduct from any payment due to the Contractor, for violations of safety provisions, as per details given below:
 - (i) Violation of applicable safety, health and environment related norm, a price reduction of INR5000/- per occasion
 - (ii) Violation as above resulting in (a) Any physical injury - a price reduction of 0.5% of the Contract Price (maximum of INR 2,00,000) per injury in addition to INR 5,000/-; or (b) Fatal accident - a price reduction of 1% of the Contract Price (maximum of INR 10,00,000) per fatality in addition to INR 5,000/-

23. SPECIAL CONTRIBUTIONS

With a view to ensure the formulation and enforcement of a safety code by the Contractor, it is

stipulated that in the event of any act, omission or accident at the Site which results in the death of a person, the Contractor shall contribute a sum of INR 5,00,000/- (Rupees five lakh only), or which results in the permanent disablement of a person, the Contractor shall contribute a sum of INR 3,00,000/- (Rupees three lakh only) in addition to any other sum(s) required to be paid by the Contractor under any law or other contract, to a welfare fund to be established by EIL for, inter alia, such contributions, and until such fund is established, to a charity nominated by EIL.



APPENDIX IV**INDEMNITY BOND****(TO BE NOTORISED AND ON STAMP PAPER OF APPROPRIATE VALUE)**

To

Engineers India Limited
(Address as applicable)

Dear Sirs,

WHEREAS EIL and address
(hereinafter called "the Indemnified" which expression shall include its successors and assigns) has awarded to M/s..... a Partnership Firm/ Sole Proprietor Business/ a company having its Registered Office at (hereinafter called "the Indemnifier", which expression shall include its successors and assigns) a contract for conditions set out, inter-alia, in "the Indemnified" Purchase Order No. dated..... (hereinafter referred to as "the said Contract") to "the Indemnifier".

AND WHEREAS "the Indemnified" has agreed to supply to "the Indemnifier" raw material/ components to the value of INR..... (Rupees..... only) for incorporation in fabrication by "the Indemnifier" in terms of "the said contract", the components/ raw material to be supplied by "the Indemnified" to "the Indemnifier" for the said fabrication, (hereinafter, or the sake of brevity, referred to as "the said material") and pending fabrication and delivery at job-site of the completed fabricated work(s) incorporating "the said material" and accounting for "the said material" shall be under the sole custody and charge of "the Indemnifier" and shall be kept, stored, altered, worked upon and/ or fabricated at the sole risk and expenses of "the Indemnifier".

As a Pre-condition to the supply of "the said material" by "the Indemnified" to "the Indemnifier", the Indemnified" has required "the Indemnifier" to furnish to "the Indemnified" security in the manner and upon terms and conditions hereinafter indicated:

NOW THEREFORE, in consideration of the premises aforesaid "the Indemnifier" Shri....., Shri..... all Directors/ Partners/ Sole proprietor of "the Indemnifier" in consideration of aforesaid "contract" hereby irrevocably and unconditionally and jointly and severally undertake to indemnify and always keep "the Indemnified" from and against all loss, damage and destruction (inclusive but not limited to any or all loss or damage or destruction to or of "the said material" or any item or part thereof) by theft, fire, flood, storm, tempest, lightning, explosion, storage, chemical or physical action or reaction, bending, wrapping, exposure, rusting, faulty workmanship, faulty fabrication or faulty method of technique of fabrication, riot, civil commotion or other act of omission or commission whatsoever within or beyond the control of "the Indemnifier", misuse and misappropriation by "the Indemnifier's" servants and/or agents whatsoever to, of or in "the said material" or any part or item thereof between the date that the same or relative part or item thereof was supplied to "the Indemnifier" up to and until the return to "the Indemnified" on due dates of "the said material" or relative part or item thereof or completed fabricated work(s) incorporating the said material AND jointly and severally undertake to pay to "the indemnified" forthwith on first demand in writing without protest or demur the value of "the said

material” or item part thereof lost, damaged, destroyed, misused and/or misappropriated, as the case may be, inclusive of “the Indemnified” ’s cost and expenses (inclusive but not limited to handling, transportation, cartage, insurance, freight, packing and inspection costs and/ or expenses) as specified in the said demand.

AND “the Indemnifier” hereby agree with “the Indemnified” that :

1. This Indemnity shall remain valid and irrevocable until the settlement of all claims of “the Indemnified” arising hereunder.
2. This Indemnity shall be in addition to any other Indemnity, Guarantee or Security whatsoever that “the Indemnified” may now or any time anywise have in relation to “the Indemnifier” ’s obligations/ liabilities under and/ or in connection with the said contract inclusive of “the said material” and “the Indemnified” shall have full authority to take recourse to or enforce this security in preference to the other security (ies) at its sole discretion, and no failure on the part of “the Indemnified” in enforcing or requiring enforcement of any other security shall have the effect of releasing “the Indemnifier” from its full liability hereunder:
3. “The Indemnified” shall be at liberty without reference to “the Indemnifier” and without affecting the full liability of “the Indemnifier” hereunder to take any other such security in respect of “the Indemnifier’s” obligations and/or liabilities under or in connection with the “said contract” inclusive of “the said material” and to vary the terms vis-a-vis “the Indemnifier” of “the said contract” or to grant time and/or indulgence to “the Indemnifier” or to reduce or to increase or otherwise vary the prices or the total contract value or the quantity, quality, description or value of the said material or to release or to forbear from endorsement of all or any of the obligations of “the Indemnifier” under the said contract (inclusive of anything in respect of “the said material”) and/or to remedies of “the Indemnified” under any other security (ies) now or hereinafter held by “the Indemnified” and no such dealing(s), variations(s), reduction(s), increase (s) or other indulgence (s) or arrangement(s) with “the Indemnifier” or release “the Indemnifier” from their full liability to “the Indemnified” hereunder or of anywise prejudicing rights of “the Indemnified” against “the Indemnifier” and “the Indemnifier” hereby waive all rights, if any, at any time, inconsistent with the terms of this Indemnity.
4. This Indemnity shall not be determined or affected by the liquidation or winding up, dissolution, or change of constitution or bankruptcy or insolvency of “the Indemnifier” and the obligations of “the Indemnifier” in terms hereof shall not be anywise affected or suspended by reason of any dispute or disputes having been raised by “the Indemnifier” (whether now pending before any Arbitrator, Officer, Tribunal or Court) or any denial of liability by “the Indemnifier” or any other order or communication whatsoever by “the Indemnifier” or any other order or communication whatsoever by “the Indemnifier” stopping or preventing or purporting to stop or prevent any payment by “the Indemnifier” to “the Indemnified” in terms hereof.
5. The mere statement made by or on behalf of “the Indemnified” in any notice or demand or other writing addressed to “the Indemnifier” as to any of “the said material” or item or part thereof supplied to “the Indemnifier” having been lost, damaged, destroyed, misused or misappropriated while in the custody of “the Indemnifier” before or after completion of the completed fabricated work(s) incorporating “the said material” and delivery at job site thereof shall as between “the Indemnifier” and “the Indemnified” be conclusive of the factum of “the said material” or item or part thereof having been supplied to “the Indemnifier” and/or the loss, damage, destruction, misuse or misappropriation thereof, as the case may be, while in the custody of “the Indemnifier” and/or

prior to the completion of the completed fabricated work(s) and delivery to job site thereof without necessity on the part of “the Indemnified” to produce any documentary proof or other evidence whatsoever in support of this.

6. The amount stated in any notice of demand addressed by “the Indemnified” to “the Indemnifier” as the value of any of “the said material”, lost, damaged, destroyed or misused or misappropriated, inclusive relative to the cost and expenses incurred by “the Indemnified” in connection therewith shall as between “the Indemnifier” and “the Indemnified” be conclusive of the value of such “said material” and the said costs and expenses as also of the amount liable to be paid by “the Indemnifier” to “the Indemnified” in terms and for the purpose of, without necessity for “the Indemnified” to produce any voucher, bill or other documentation or evidence whatsoever in support thereof.

In witness whereof “the Indemnifier” have hereunto set and subscribed his hand this day and year first hereinabove written in the presence of witnesses.

Yours faithfully,

1.

2.

3.

WITNESSES:

1.

2.



APPENDIX V**PART A****FORMAT-I****INTIMATION REGARDING SYSTEM COMPLETION**

PROJECT: _____ CUSTOMER: _____

UNIT: _____

Following system/sub-system has been mechanically completed in all respects with exceptions noted below. The system/sub-system can be taken up for checking and preparation of checklist.

SYSTEM NO.**SYSTEM DESCRIPTION:****EXCEPTIONS:**

SIGNATURE

DATE

CONTRACTOR'S CONSTRUCTION:

CO-ORDINATOR

The system is ready/ not ready for Check listing
EIL/PMC



PART B**FORMAT-II****CHECKLIST**

PROJECT: _____ CUSTOMER: _____ UNIT: _____
SYSTEM/SUB-SYSTEM _____

CHECKLIST TYPE**PRELIMINARY/FINAL****SL.NO.****CHECKLIST ITEMS****REMARKS**

PMC/EIL:

SIGNATURE

DATE



APPENDIX VI
FORMAT-III
READY FOR PRE-COMMISSIONING CERTIFICATE

PROJECT: _____ CUSTOMER: _____ UNIT: _____
SYSTEM/SUB-SYSTEM _____

This is to certify that the following Plant/system/sub-system as detailed below is completely installed and all the Checklist points are carried out except for minor details s given in the attached list.

DESCRIPTION ON PLANT/SECTION/SUB-SECTION

SIGNATURE	DATE
CONTRACTOR'S CONTRACTION CO-ORDINATOR:	
CONTRACTOR'S COMMISSIONING CO-ORDINATOR:	

The system is ready/ not ready for Check listing
PMC/EIL:

APPENDIX VII
FORMAT-IV
READY FOR COMMISSIONING CERTIFICATE

PROJECT: _____ CUSTOMER: _____ UNIT: _____
 SYSTEM/SUB-SYSTEM _____

This is to certify that all the necessary pre-commissioning activities for the system/sub-system as detailed below have been completed and the system/sub-system is ready for commissioning except for the minor details as given below which will not effect the commissioning trial runs.

DESCRIPTION	ON	PLANT/SECTION/SUB-SECTION

SIGNATURE

DATE

CONTRACTOR'S COMMISSIONING:
 CO-ORDINATOR

SIGNATURE

DATE

PMC/EIL:



**APPENDIX VIII
FORMAT-V**

COMPLETION OF COMMISSIONING CERTIFICATE

PROJECT: _____ CUSTOMER: _____ UNIT: _____
SYSTEM/SUB-SYSTEM _____

This is to certify that the system/sub-system as detailed below has been successfully commissioned and is under operational control of Client's Production department. The minor items, which will not effect the normal operation of the system/sub-system, are given in the attached list.

DESCRIPTION	ON	PLANT/SECTION/SUB-SECTION

DATE

SIGNATURE

CONTRACTOR'S COMMISSIONING:
CO-ORDINATOR

DATE
PMC/EIL:

SIGNATURE



PROJECT: TRINITROTOLUENE (TNT) PLANT AT HIGH EXPLOSIVES FACTORY (HEF)
KHADKI OF MUNITIONS INDIA LIMITED (MIL) AT KHADKI, PUNE, MAHARASHTRA

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SPECIAL CONDITIONS OF CONTRACT

PROJECT: TRINITROTOLUENE (TNT) PLANT AT HIGH EXPLOSIVES FACTORY (HEF)
KHADKI OF MUNITIONS INDIA LIMITED (MIL) AT KHADKI, PUNE, MAHARASHTRA

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1.	ANNEXURE-I	TIME SCHEDULE
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1.0 INTRODUCTION

- 1.1 These Special Conditions of Contract shall be read in conjunction with the General Conditions of Contract, specifications of work, drawings and any other document forming part of this contract wherever the context so requires.
- 1.2 Notwithstanding the sub-division of the document into these separate sections and volumes, every part of each shall be deemed to be supplementary of every other part and shall be read with and into the contract so far as it may be practicable to do so.
- 1.3 Where any portion of the GCC is repugnant to or at variance with any provisions of the Special Conditions of Contract, then unless a different intention appears, the provision(s) of the Special Conditions of Contract shall be deemed to override the provision(s) of GCC only to the extent that such repugnancy of variations in the Special Conditions of Contract are not possible of being reconciled with the provisions of GCC.
- 1.4 In the absence of any Specifications covering any material, design or work(s) the same shall be performed/supplied/executed in accordance with standard Engg. Practice as per the instructions/directions of the Engineer-in-Charge, which will be binding on the Sub- Contractor.

2.0 DEFINITIONS

- 2.1 For the purpose of the Contract, unless otherwise specified or repugnant to the subject or context, the following terms shall be deemed to have the following meanings. These are in addition to the defined words appearing in General Conditions of Contract (GCC) and wherever there are contradictions, the definitions appearing in the SCC shall take precedence.
- 2.2 “**Client/ Owner**”: Client/ Owner means Project Owner i.e., “Munitions India Limited (MIL), 2nd Floor Nyati Unitree, Nagar Road, Yerwada, Pune, Maharashtra, India. Pin- 411006, India” as mentioned in Bidding Document.
- 2.3 “**Contractor**” means Engineers India Limited, a company incorporated under the Companies Act, 1956 with its registered office at 1, Bhikaji Cama Place, R.K Puram, New Delhi-110066 (INDIA).
- 2.4 “**Sub-Contractor**” shall mean Individual, Agency, Firm or Company (whether incorporated or not) selected by the EIL (Contractor) for the performance of the Contract and shall include its legal representatives, successors and permitted assigns.
- 2.5 **Subcontractor of main Sub-Contractor** means any person named in the Contract as a subcontractor or an original manufacturer, supplier of any Goods and Materials, Plant, labour or services, appointed by Sub-Contractor of EIL, for the Works or any person to whom a part of the Works has been subcontracted by the Sub-Contractor with the prior Approval of Engineer-in-Charge, as the case may be, and the permitted legal successors in title to such person, but not any assignee of such person.

3.0 LOCATION OF SITE

The Site is located at Trinitrotoluene (TNT) Plant at High Explosives Factory (HEF) Khadki of Munitions India Limited (MIL) at Khadki, Pune, Maharashtra.

4.0 LAND, POWER, WATER AND OTHER FACILITIES

Clause No. 9.21 of GCC, regarding Land, Water, Power and other facilities is partially modified to following extent:

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4.1 LAND

MIL/EIL shall provide space for temporary site office (open or covered) at job site free of cost. Further, no land shall be provided for accommodation purposes to the Sub-Contractor, or the purposes of any Sub-Contractor's personnel.

4.2 CONSTRUCTION POWER

Power/electricity for this work shall be provided by the Owner without any cost.

4.3 CONSTRUCTION WATER

Water for this work shall be provided by the Owner without any cost.

5.0 TIME FOR COMPLETION

5.1 The Work shall be executed strictly as per time schedule given in **Annexure- I to SCC**. The period of completion given includes the time required for mobilization, demobilization and completion of work in all respects to the satisfaction of the Engineer-in-Charge.

5.2 A joint programme of execution of work will be prepared by the Engineer-in-Charge and Sub-Contractor. This programme will take into account the time of completion mentioned above.

5.3 Monthly / Weekly execution programme will be drawn up by the Engineer-in-Charge jointly with the Sub-Contractor based on priorities and the joint programme of execution as referred to above. The Sub-contractor shall scrupulously adhere to the Targets/Programmes by deploying adequate personnel, Construction Equipment, Tools and Tackles and also by timely supply of required materials coming within his scope of supply as per Contract. In all matters concerning the extent of target set out in the weekly/monthly programme and the degree of achievement, the decision of the Engineer-in-Charge will be final and binding on the Sub-contractor.

5.4 If the Sub-contractor fails to achieve the targeted progress schedule of each month as mentioned in the bidding document, EIL at its option, may terminate the contract due to Sub-contractor's default and get the work completed from other sources at Sub-contractor's risk & cost.

5.5 Sub-contractor shall give every day category-wise labour, Manpower and equipment deployment report along with the progress of work done on previous day in the format prescribed by the Engineer-in-Charge.

5.6 The Sub-contractor shall submit fortnightly report covering all major activities indicating schedule / actual progress, slippages & its reasons and catch-up plan.

5.7 Fronts (i.e., Drawing front / Physical front (Corresponding to drawing)) shall be released to the Sub-Contractor as per ANNEXURE – I TO SCC. Extension in time of completion due to delay in release of work fronts to the Sub-Contractor shall be evaluated as per ANNEXURE – I TO SCC.

6.0 SCOPE OF WORK

6.1 The scope of work in general includes scope of work specified in various Technical Specifications provided in technical portion of the bidding document and Schedule of Rates (SOR) enclosed in the Bidding Document. Further, it includes any other work not specifically mentioned but required to complete the work as per specifications, drawings and instructions of Engineer-in-Charge.

6.2 Scope of work shall be read in conjunction with item description of Schedule of Rates and Sub-Contractor's scope shall include all activities of work specified in the item description of Schedule of Rates.

6.3 Rates shall include all cost for the performance of the item considering all parts of the Bidding Document. In case any activity though specifically not covered in description of item under 'Schedule of Rates' but is required to complete the work which could be reasonably implied/ informed from the content of Bidding Document, the cost for carrying out such activity of work shall be deemed to be included in the item rate.

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7.0 SCOPE OF SUPPLY

7.1 The scope of supply is as mentioned in Job Specifications/ Technical Specifications, Schedule of Rates etc. of Bidding Document. All materials, equipment, labour & consumables required for successful completion of work as per the description of item in Schedule of Rates shall be supplied by the Sub-Contractor and the cost of such supply shall be deemed to be included in the quoted rates without any additional liability on the part of EIL except for the material specifically covered under EIL's Scope of Supply.

8.0 TERMS OF PAYMENTS

Clause No. 23 of GCC regarding Terms of Payment is partially modified to following extent:

8.1 The basis and Terms of Payments for various items of schedule of rate, for making "On Account Payments" shall be as set out in **ANNEXURE-II to SCC**.

8.2 For all payment purposes, measurement shall be as set out in **ANNEXURE-III to SCC**.

8.3 Invoice Instructions:

Sub-Contractor shall submit the following documents along with the monthly invoices:

A. Along with first invoice:

- a. Copy of valid registration certificate under the GST Law.
- b. Particulars required for making payment through „Electronic Payment Mechanism“
- c. Mobile No. (Optional)
- d. Email id.

B. Periodical / Monthly payment:

- a. Invoice (i.e., Tax invoice as per relevant GST rules, indicating GST registration number and HSN and / or SAC No., Rate and amount of GST shown separately.
- b. Copies of challans / receipt of payments of contributions for their employees to the Authorities Employees" Provident Fund and Miscellaneous Provisions Act, 1952 and the Employees" State Insurance Act, 1948 prescribed under the said Acts such payments along with the list showing persons employed together with emoluments paid for the purpose of provident fund deductions shall be submitted to EIL before the end of every calendar months.
- c. Wage Register, Attendance Register, Register of Loan Recoveries, Overtime Register. Bank Statement in respect of disbursement of wages, Employee Salary Slip Copy of Wage Slip, Professional Tax, Bonus Register, Leave with wages Register, PF Payment Confirmation, PF Combined Challan, PF ECR (electronic challan cum returns), ESI Payment Confirmation Challan, ESI Contribution Statement etc .
- d. Undertaking by the SUB-CONTRACTOR regarding compliance of all statutes.
- e. Any other document specifically mentioned in the Contract, or supporting documents in respect of other claims (if any), permissible under the contract.

8.4 In the event of EIL objecting to any portion of work covered by the said invoice, such objection shall be communicated to the Sub-Contractor. Sub-Contractor shall have the right to claim the payment of such amounts objected by EIL in subsequent invoice after removal of cause of such objection.

8.5 In the event of EIL noticing at any time that any amount has been disbursed wrongly to the Sub-Contractor or any other amount is due from the Sub-Contractor to EIL, EIL may without prejudice to its rights recover such amounts by other means after notifying the Sub-Contractor or deduct such amount from any payment failing due to the Sub-Contractor. The details of such recovery, if any, will be intimated to the Sub-Contractor.

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8.6 DIGITAL PAYMENTS

In order to encourage and facilitate digital payments, Sub-Contractor has to ensure that all payments to Workmen, further Sub-Contractors / Suppliers of Materials & Services are made in form of e-payment only, as per due dates, wherever applicable.

The SUB-CONTRACTOR has to ensure timely payment of wages through e-payment only.

9.0 TAXES AND DUTIES

Clause No. 15 of GCC, as applicable, regarding Taxes & Duties is partially modified to following extent:

9.1 Price basis w.r.t inclusion/exclusion of taxes

9.1.1 The quoted price shall be deemed to be inclusive of all the taxes and duties except GST (i.e. IGST or CGST and SGST/UTGST applicable in case of interstate supply or intra state supply respectively and GST compensation cess, if applicable).

9.2 TAX CLAUSES

9.2.1 Provisions of Taxes and Duties shall be as per Annexure- IV to this SCC.

9.2.2 Clause E of Annexure – IV to SCC (EVALUATION METHODOLOGY W.R.T. TAXES) stands replaced with the following: GST shall not be loaded for price bid evaluation purpose. GST compensation cess (if any) as quoted by bidder shall be loaded for price bid evaluation purpose. [Refer BDS for details]

9.2.3 The subject Contract is a Works contract as defined as per Sec. 2(119) of CGST Act. This works contract shall be treated as service as per Schedule II (Entry 6(a) of CGST Act and tax would be charged accordingly. Consequently, GST rates, time of supply rules, place of supply rules, valuation rules as are applicable on services will apply to works contracts. While deciding whether a supply is intrastate or inter-state, the place of supply of service shall be applicable to the Works contract. Present rate of Tax for Composite supply of Works contract is 18% on the total contract price.

9.3 In addition to the provisions of Annexure-IV to SCC on Taxes & Duties, following shall be applicable: -

9.3.1 Merit rate of custom duty is applicable.

9.3.2 BOCW Cess at the prevailing rate, if applicable, shall be remitted to the “Secretary, Building and Other Construction Workers Welfare Board” of the concerned State by the Contractor. The same shall be reimbursed to the Sub-Contractor by EIL/OWNER, based on the submission of the proof of payment.

9.3.3 The statutory variation in Basic Custom Duty (BCD) & Social Welfare Surcharge (SWS) shall be upto 2/3rd of Contractual delivery/ completion period.

9.4 Escalation on Supply of Items in Item Rate Tenders: Not Applicable for this tender

10.0 FIRM PRICES

The quoted price shall remain firm and fixed and valid until completion of the contract and shall not be subjected to escalation for any reason what so ever, except as specified below:

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10.1 Variation due to taxes & duties

Provisions of Statutory variation shall be as per **Annexure-IV** to this SCC.
The statutory variation in Basic Custom Duty (BCD) & Social Welfare Surcharge (SWS) shall be upto 2/3rd of Contractual delivery/ completion period.

10.2 Escalation on Supply of Items in Item Rate Tenders – NOT APPLICABLE

11.0 SITE ORGANISATION

The Sub-Contractor shall without prejudice to his overall responsibilities and liabilities to provide adequate qualified and skilled personnel on the work as per **Annexure-V to SCC** and shall deploy site organization and augment the same as decided by the Engineer-in-Charge depending on the exigencies of work. Qualification and Experience of key construction personnel shall be as per document no. 7-82-0003 (enclosed as **Annexure-VI to SCC**). In addition to this, Sub-Contractor shall deploy Safety Supervisors to ensure safer working conditions at site. In case where the works are Subcontracted by the main Sub-Contractors (of EIL), Safety Supervisors are to be provided by the main Sub-Contractor (of EIL).

12.0 QUALITY MANAGEMENT SYSTEM

Clause No. 9.19 of GCC regarding Quality Management System is partially modified to following extent:

- 12.1 The Sub-Contractor shall adhere to the quality assurance system as per EIL Specification No. **6-78-0001** enclosed as per **Annexure-VII to SCC**. After the award of the contract, detailed quality assurance programme to be followed for the execution of contract shall be submitted by Sub-Contractor.

13.0 PROTECTION OF EXISTING FACILITIES

Sub-Contractor shall obtain full details of all existing and planned underground services from EIL/OWNER and shall follow these closely at all times during the performance of work. Sub-Contractor shall be responsible for location and protection of all underground lines, structures, power cables, OFC cables etc. at his own cost.

Despite all precautions, should any damage to any structure / utility etc. occur, the Sub-Contractor shall contact EIL/ OWNER and Sub-Contractor shall forthwith carry out repair at his expenses under the direction and to the satisfaction of Engineer- in-Charge. If the same is not attended by the Sub-Contractor within the said time period, will be get done at penal rates through other agency at Sub-Contractor's risk and cost.

Sub-Contractor shall take all precautions to ensure that no damage is caused to the existing pipelines, cables etc. during construction.

14.0 UNDERGROUND AND OVERHEAD STRUCTURES

Engineers-in-Charge/ OWNER shall provide, to the best possible extent, details in respect of existing structures, overhead lines, existing pipelines and utilities existing at job site to the Sub-Contractor. The Sub-Contractor shall execute the work in such a manner that the said structures, utilities, pipelines etc. are not disturbed or damaged, and shall indemnify and keep indemnified EIL/ OWNER from and against any destruction thereof or damages thereto. Sub-Contractor shall conduct their own survey (if required) and use their information to avoid damage in existing facilities/structures etc. Moreover, Sub-Contractor shall prepare drawing showing all the above stated details accurately and submit to Engineer-in-Charge. No extra payment shall be made on this account. The contract price/ item rates are deemed to be inclusive of the costs towards this activity.

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Should any damage be done by the Sub-Contractor to any mains, pipes, cables or lines (whether above or below ground etc.), whether or not shown on the drawings the Sub-Contractor shall make good or bear the cost of making good the same without delay to the satisfaction of the Engineer-in-Charge.

b-Contractor to any mains, pipes, cables or lines (whether above or below ground etc.), whether or not shown on the drawings the Sub-Contractor shall make good or bear the cost of making good the same without delay to the satisfaction of the Engineer-in-Charge.

15.0 COORDINATION WITH OTHER AGENCIES

15.1 Sub-Contractor shall be responsible for proper coordination with other agencies operating at the site of work so that work may be carried out concurrently, without any hindrance to others. The Engineer-in-Charge shall resolve disputes, if any, in this regard, and his decision shall be final and binding on the Sub-Contractor.

15.2 If and when required for the coordination of the works with other agencies involved at site, the Sub-Contractor shall within the scope of work, re-route and/or prepare approaches and working areas as may be necessary.

16.0 MECHANISATION OF CONSTRUCTION ACTIVITIES AND MOBILISATION OF CONSTRUCTION EQUIPMENT

16.1 MECHANISATION OF CONSTRUCTION ACTIVITIES

16.1.1 The Sub-Contractor shall mechanize the construction activities to the maximum extent by deploying all necessary construction equipment/ machinery in adequate numbers and capacities.

16.1.2 For speedy execution of work, Sub-Contractor shall also ensure use of computer software for at least the following:

- (i) Billing
- (ii) Planning & Scheduling
- (iii) Progress Reporting
- (iv) Material Control & Warehousing
- (v) Safety Records
- (vi) Resource Deployment
- (vii) Communication

Sub-Contractor further agrees that Contract price is inclusive of all the associated costs, which he may incur for actual mobilization, required in respect of use of mechanized construction techniques and EIL in this regard shall entertain no claim whatsoever.

16.1.3 MOBILISATION OF CONSTRUCTION EQUIPMENTS

16.1.4 The Sub-Contractor shall without prejudice to his responsibilities to execute and complete the work as per the specifications and time for completion, progressively deploy minimum construction equipment & tools and further augment the same depending on the exigencies of work as per **Annexure-VIII to SCC** and as decided by the Engineer-in-Charge so as to suit the construction schedule within scheduled completion date without any additional cost to EIL.

Modular concepts & prefabrication & pre-cast methods to the extent the same adds value in terms of quality, safety & cost effectiveness & other techniques for fast tracking the implementation during construction shall be adopted with the approval of Engineer-in Charge.

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16.1.5 CALIBRATION REQUIREMENTS OF MONITORING AND MEASURING DEVICES AT SITE

Calibration Requirements of Monitoring and Measuring Devices at Construction Site shall be as per document no. 7-82-0002 (enclosed herewith as **ANNEXURE-IX of SCC**).

~~17.0 CONDITIONS FOR ISSUE AND RECONCILIATION OF MATERIALS~~

- ~~17.1 Free Issue Materials (FIM), if any, shall be issued as per terms and conditions set forth in the General Conditions for of Contract (GCC) from EIL/MILs stores or other issue points of EIL/MIL.~~
- ~~17.2 Every month, Sub-Contractor shall submit an account for all materials issued by EIL/MIL in the proforma prescribed by the Engineer-in-Charge. On completion of work the Sub-Contractor shall submit "Material Appropriation Statement" for all materials issued by the EIL/Owner.~~
- ~~17.3 Wherever materials are under Sub-Contractor's scope of supply whether part or in full for any item of work covered under SOR, no allowances towards wastage/scrap etc. shall be accounted for.~~
- ~~17.4 The conditions for issue of materials by EIL/MIL and reconciliation of such materials shall be as per document no Specification No. 7-82-0001 (enclosed attached herewith as Annexure-XI to SCC). This shall not be applicable for the materials supplied by Sub-Contractor.~~
- ~~17.5 Following has been added to provisions of Annexure-XI to SCC "Condition for Issue and Reconciliation of Materials":~~

~~For return of surplus serviceable materials, (applicable only for items/materials supplied by Owner/EIL), the Sub-Contractor shall prepare Material Handover Note (MHON) mentioning the MIL SAP item code, which will be approved by MIL Projects or MIL maintenance as applicable and handover the material to MIL Materials department who in turn will provide acknowledgement. If MIL SAP code is not available then Contractor/EIL shall provide the details of the material in the MIL format for creation of SAP material code and send it to MIL Projects for code creation. Once code is created follow above MHON procedure.~~

18.0 DISPOSAL OF SURPLUS MATERIALS (INCLUDING SCRAP AND DEBRIS) BY SUB - CONTRACTOR

Following stands added as 2nd paragraph to clause no. 9.12.2 (b) of GCC:

- 18.1 The surplus & scrap materials (if any) related to Sub-Contractor supplied material shall be taken out by the sub-contractor post submission of reconciliation statement to EIL.
- 18.2 Land for disposal of surplus earth/debris/rocks etc. shall be provided by Owner within Ordnance Premises.
- 18.3 Land for disposal /cut tree to be provided by Owner within Ordnance Premises. The distance (Leads) outside the plant boundary/ within the plant from the work area/unit for disposal of debris/earth/materials etc. shall be with lead of 100m, 100m to 1 km and upto maximum of 3 km within project premises.

19.0 ENTRY PASSES, GATE PASSES AND WORK PERMITS

- 19.1 Sub-Contractor shall comply with MIL's work permit system, gate pass system for staff, labour and materials, Vehicle permit system/ rules prevailing at the project site. All such prevailing rules and regulations are to be complied by Sub-Contractors without any time and cost impact to the EIL/ MIL.

19.2 WORKING HOURS

Sub-Contractor shall follow central/ MIL enactment for working hours and shall obtain due permissions from EIL under such enactment wherever required. Sub-Contractor shall solely be responsible for any infringements and consequential penalties or payments. The working in operational area shall be allowed between sunrises to sunset hours

19.3 IDENTITY CARDS:

Sub-Contractor shall ensure that the proper identification card are issued by Sub-Contractor or its Sub-Contractor to their employees/ workers to be deputed by him for the work, duly signed by the Sub-Contractor or an authorized person on behalf of the Sub-Contractor.

19.4 ENTRY PASSES

19.4.1 It shall be the responsibility of the Sub-Contractor to fully comply with the following Security Provisions:

- (i) Entry/Access to any field / facility is governed by rules & regulations formulated from time to time by the Government of India and / or its concerned departments / agencies, which are binding on the EIL/ MIL and Sub-Contractors, etc. All such rules and regulations (including amendments if any) are to be complied without any time and cost impact to the EIL/ MIL. The present requirements in this regard are as follows:

For all the personnel (Indian/Foreigners) of Sub-Contractor and/or their subcontractors (of Sub-Contractor), the Procedure for security clearance as listed below will have to be strictly followed/complied with before entering the Work Site. Any subsequent changes/modifications as may be issued from time to time in this regard shall also have to be duly complied without any time and cost impact to the EIL/ MIL.

MIL Security Section has right to deny permission to any person to go to the Site in case either the required procedures are not complied with or any person comes without stipulated advance notice, and in that case the EIL/ MIL will not be liable for any cost and time impact.

Sub-Contractor is to ensure that all the personnel engaged by them abide by the Security & Discipline Rules prescribed from time to time by the Security Section of the EIL/MIL.

20.0 CONTRACT PERFORMANCE GUARANTEE / SECURITY DEPOSIT

Clause No. 9.4.2 of GCC regarding Contract Performance Bank Guarantee is replaced as follows:

20.1 The Sub-Contractor shall within 15 (Fifteen) days of issue of FOA/ LOA, deposit with the company an interest free Security Deposit (SD) in favour of EIL for an amount equivalent to percentage of the Contract Value (excluding GST), as referred in Bid Data Sheet, in the form of Bank draft/ Pay Order/ Bank Guarantee/ Fixed Deposit Receipts(FDRs)/ Unconditional Insurance Surety Bond(ISB).

If the Security Deposit is submitted in the form of Bank Guarantee or Fixed Deposit Receipts (FDRs), the bank guarantee or Fixed Deposit Receipts (FDRs) towards security deposit shall be from Scheduled Bank. The Unconditional Insurance Surety Bond shall be from an Indian Insurance Company (Insurer) registered with Insurance Regulatory and Development Authority of India (IRDAI) and in addition to Insurance Surety Bond Sub-Contractor shall also submit accompanying policy document. The Bank Guarantee or Fixed Deposit Receipts (FDRs) or Unconditional Insurance Surety Bond (ISB) submitted in lieu of security deposit shall be kept valid up to contract period plus defect liability period plus two months for claim period. Bank Guarantee (BG or e-BG), Fixed Deposit Receipts (FDRs), Insurance Surety Bond (ISB) shall be submitted as per the format Annexure -XVI & XVI (A) & XVI (B).

Security Deposit (SD) for 10% of Contract Value) shall be reduced to 5% of the Contract Value after completion and acceptance of works towards performance during defect liability period. This reduced value of security deposit shall remain valid till defect liability period plus two months claim period.

20.2 Alternatively, Sub-Contractor shall have the option of converting the EMD into initial Security deposit. In such a case, Sub-Contractor shall, within 15 days of issue of FOA/ LOA/GeM Contract, furnish a letter exercising the option of converting EMD into Initial Security deposit. The Bank Guarantee/ Fixed Deposit Receipts (FDRs) furnished towards EMD shall appropriately be

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 amended including extension up to Contract Period plus two months for claim period so that the same can be treated as initial security deposit.

If the LOA / FOA/GeM Contract is issued to a Sub-Contractor who have not submitted the EMD (under the exemption provisions available in the bidding document), then such Sub- Contractor will be required to submit the EMD amount as interest free Initial security deposit to EIL, within 15 days of issue of FOA / LOA/GeM Contract, in the form of bank demand draft / pay order / bank guarantee/ Fixed Deposit Receipts(FDRs), valid upto defect liability period plus two months claim period.

- 20.3** In addition to the above initial security deposit, from each RA bills a differential amount in percentage (equal to 10% of estimated contract value minus EMD amount) # **shall** be deducted towards security deposit. Thus, RA bill payments shall be released to the Sub- Contractor after deduction of the security deposit. Non-refundable interest shall be charged at the rate **SBI base rate prevailing on the date of issue of enquiry plus 1%** (refer Bid data Sheet), from the date the BG towards security deposit becomes due and shall be chargeable on the reducing balance left after apportioning the SD amount accumulated from each running bill, till complete SD amount of 10% is recovered from the bills.

It is clarified here that option of deduction of differential amount in percentage towards security deposit shall be applicable only when bidder have submitted the EMD in the bid and opts to convert prescribed EMD into initial security deposit.

- 20.4** However, Sub-Contractor shall have the option to submit a BG towards Security Deposit valid up to defect liability period plus two months for claim period, for an amount equivalent to 10% of estimated contract value at any time during the pendency of the contract. Pursuant to this, the amount so far retained in lieu of security deposit along with BG towards initial security deposit shall be released immediately. The interest so charged shall not be refunded.
- 20.5** In case sub-contractor does not opt for submission of BG towards security deposit till completion of works, the amount retained on account of SD along with BG towards initial security deposit, shall be released only after expiry of Completion Period and settlement of all dues in all respects, to the satisfaction of the Engineer-in-charge and submission of "No dues certificate" & "No claim certificate" by the sub-contractor. The company reserves the right to deduct any amount due to the company from security deposit at the time of expiry of contract/ termination of contract.
- 20.6** The Bank guarantee towards SD (or the Initial Security deposit, as the case may be) shall be extended by such period as EIL may require if the Completion is delayed/ extended beyond the schedule time for completion, as per direction of the Engineer-in-Charge.
- 20.7** In the event, if Contract Price is increased during the Contract Validity Period for any reason whatsoever, the value of the Bank Guarantee towards SD shall be increased proportionately by the Sub-Contractor within 7 (Seven) Days to ensure that it remains valid for an amount which is equivalent to 10% of the revised Contract Price, as determined by the engineer-in- Charge, else amount equivalent to the 10% of such differential between estimated original contract price and executed contract price shall be withheld/ deducted from the RA bills on account of increase in the Security Deposit.
- 20.8** If the Sub-Contractor fails to provide, maintain or renew the Security Deposit in accordance with the Contract, then EIL may, without prejudice to any other rights and remedies, to which it may be entitled, by giving written notice, terminate the Contract forthwith.
- 20.9** In case Sub-Contractor does not furnish Bank guarantee towards security deposit as per clause 20.1 or does not exercise the option of converting EMD towards Initial security deposit as per clause 18.2 above, then the EMD submitted by the Sub-Contractor shall be liable to be forfeited.

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- 20.10** In case Sub-Contractor, after confirming that he will exercise the option of converting EMD into initial security deposit, does not submit the amended bank guarantee, payment shall not be released unless the amended BG is submitted, unless full amount of security deposit along with accrued interest thereon is recovered from the running bill.
- 20.11** Contract agreement shall be signed on receipt of CPBG from the Sub-Contractor or a letter from him exercising the option of converting EMD into initial security deposit.
- 20.12** The Sub-Contractor shall submit the Security Deposit within the period stipulated. EIL may extend such period with applicability of recovery of accrued interest for the delayed period.

#- It is clarified here that, balance % of security deposit pursuant to adjustment of Initial Security Deposit (submitted in the form of EMD) shall be deducted @ 10% from each RA bill and not the total security deposit in one go from initial RA bill, till the balance Security Deposit is recovered.

21.0 REQUIREMENTS FOR DOCUMENTATION

21.1 The Sub-contractor shall adhere to the requirements for Documentation as per EIL Specification no. 6-78-0002 attached as Annexure X to SCC.

21.2 Record Maintenance which are essential as part of CTE requirements are as per following:

- Daily Progress Report
- Maintenance of Hindrance Register
- Cement Consumption Register
- Pile Bore Logs
- Pour cards
- Gate Passes for Steel & Other material entry
- Scrap Reconciliation report
- Survey Field Note Books certification
- Maintenance & Certification of Cube test reports
- Safety Register
- Measurement Book
- Lab Test reports
- Drawings Control register
- Deviation Permits / Cost Benefit calculation, review of contractor documents & recommendation
- Seigniorage records maintenance, reconciliation, Follow up with contractors for MRC, etc.
- Bar Bending Schedule
- Daily Attendance Register
- Records of payments of ESI, EPF, Insurance, etc.
- Details of Safe Manhours "

22.0 OTHERS

22.1 SITE CLEANING

In addition to the provisions of relevant clause of General Conditions of Contract (GCC) and associated provisions thereof, the Sub-Contractor shall also comply with the following:

- The Sub-Contractor shall clear the site of work simultaneously as the work proceeds on daily basis failing which the same shall be got cleared by the Owner / EIL at the risk and cost of Sub-Contractor by giving him one day notice.

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- If the work involves dismantling of any existing structure in whole or part, care shall be taken to limit the dismantling up to the exact point and/or lines as directed by the Engineer-in-Charge and any damage caused to the existing structure beyond the said line or point shall be repaired and restored to the original condition at the Sub-Contractor's cost and risks to the satisfaction of the Engineer-in-Charge, whose decision shall be final and binding upon the Sub-Contractor.
- The Sub-Contractor shall be the custodian of the dismantled materials till the Owner / EIL takes charge thereof.
- The Sub-Contractor shall dispose off the unserviceable materials, debris etc. to any area as decided by the Engineer-in-Charge.
- The Sub-Contractor shall sort out, clear and stack the serviceable materials obtained from the dismantling/renewal at places as directed by the Engineer-in-Charge.
- No extra payment shall be paid on this account.

22.2 General Environment Requirement

The Sub-Contractor has to ensure efficient use of natural resources like water, fuel oil and lubricants. The Sub-Contractor should ensure proper awareness to workers to maintain a green and clean environment inside/outside the plant.

The Sub-Contractor shall be responsible to arrange for the fuel requirement of his workers and staff without resorting to cutting of trees and shrubs. Cutting of trees and shrubs is strictly prohibited for this purpose.

23.0 ELECTRICAL CONTRACTOR'S LICENSE

23.1 The Sub-Contractor or its nominated Subcontractor(s) (of Sub-Contractor), as the case may be, shall have a valid electrical contractor's license for working in the State in which the job site is located. The Sub-Contractor shall furnish a copy of the same to Engineer-in-charge before commencement of any electrical work or work pertaining to Electrical System.

23.2 No electrical work or work pertaining to electrical system(s) shall be permitted to be executed without a valid Electrical Contractors License being produced by the Sub-Contractor or his nominated Sub-Contractor, as the case may be, intending to execute the work.

24.0 MAKE OF MATERIALS

24.1 The materials required to be supplied by the Sub-Contractor under this contract shall be procured only from EIL approved vendors. Where the makes of materials are not indicated in the Bidding document, Sub-Contractor shall furnish the details of makes and shall obtain prior approval of Engineer-in-Charge of vendors / sub-vendors before placing order.

24.2 The Sub-contractor shall purchase TMT Bars, Structural Steel and Cement as per the provisions defined in ANNEXURE-XII.

25.0 CERTIFICATE OF VERIFICATION AND GOOD CONDITION

25.1 The Sub-Contractor shall, before supply of material covered within the scope of supply, at his own risks, costs and initiative, undertake or cause to be undertaken all tests, analysis and inspections as shall be required to be undertaken with regard to the materials under the specification and any codes, practices, orders and instructions with respect thereto and shall cause the results thereof to be recorded, reported or certified, as the case may be, and shall not offer for delivery or deliver any

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material(s) which has / have not passed such tests / analysis or inspection and which are not accompanied by the tests results, reports and / or certificates in this behalf provided in the applicable specifications, code(s) and / or practices.

- 25.2** A certificate of verification and good condition in respect of such material shall be issued by EIL and shall accompany the invoice raised for the respective material. Sub-contractor/sub- Contractor (of sub-contractor) shall ensure that all guarantees or warranties issued by manufacturers of plant, machinery, equipment supplied by Sub-contractor/sub-Contractor (of sub-contractor) and covering the performance of the said material and equipment supplied by them be issued in the joint name of EIL and OWNER so that OWNER enjoys the same benefits and protection.
- 25.3** Notwithstanding any other provisions in the contract documents for analysis or tests of materials and in addition thereto, the Sub-Contractor shall, if so required by the Engineer-In- Charge or inspection agency in writing at his own risks and costs, analyse, test, prove and weigh all materials (including materials incorporated in the works) required to be analyzed, tested, proved, and / or weighed by the Engineer-In-Charge or inspection agency in this behalf and shall have such analysis or tests conducted by the agency(ies), or authority(ies) if any specified by the Engineer-In-Charge or Inspection agency. The Sub-Contractor shall provide all equipment, labour, materials, and other things whatsoever required for testing, preparation of the samples, measurement of work and / or proof of weightment of the materials as directed by the Engineer-In-Charge or Inspection agency.
- 25.4** If on inspection of proof, analysis or tests as aforesaid the Engineer-In-Charge or Inspection agency is prima facie satisfied that the material received is in conformity with the material requirements of the Bill of materials and description given in the Shipping documents and in the contractor's invoices in this behalf and that the test reports / results / certificates given in respect thereof are prima facie in conformity with the relevant result / reports / certificates required in respect thereof in terms of the specifications and / or relevant codes and practices, and that the material appears to be prima facie in good order and condition, the Engineer-In-Charge/TPI agency (in such cases) shall issue to Sub-Contractor, a certificate of verification and good condition in respect of such material.
- 25.5** Material received is in conformity with the material requirements of the Bill of materials and description given in the Shipping documents and in the contractor's invoices in this behalf and that the test reports / results / certificates given in respect thereof are prima facie in conformity with the relevant result / reports / certificates required in respect thereof in terms of the specifications and / or relevant codes and practices, and that the material appears to be prima facie in good order and condition, the Engineer-In-Charge/TPI agency (in such cases) shall issue to Sub-Contractor, a certificate of verification and good condition in respect of such material.
- 25.6** Such certificate in such cases is only intended to satisfy the EIL/ MIL that prima facie the material supplied by the Sub-Contractor is in order and shall not anyway absolve the Sub- Contractor of his / its full responsibility under the contract in relation thereto including in relation to specification fulfilment and / or performance or other guarantees.
- 25.7 Inspection**
- 25.7.1** The provisions of inspection of work shall be as per GCC. However, all supply items/materials shall be subject to pre-despatch inspection from any of the approved TPI agencies (out of the list mentioned below) and shall be arranged by Sub -Contractor at his own cost (i.e. Sub- Contractor to quote prices including inspection charges for supply items).
- 25.7.2** Inspection and test shall be made as per specifications forming part of contract various stages of inspection and testing shall be identified after receipt of quality assurance programme from the Sub-Contractor/Manufacturer.

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25.7.3 The material shall be procured from EIL approved vendors and will be accepted at site by EIL on the basis of inspection certificate issued by TPIA/Manufacturer's Test reports, as applicable, as per the provision of bidding document

25.8 List of approved TPI agencies are as follows.

- i. TÜV SÜD South Asia, Mumbai
- ii. DNV GL. AS, Mumbai
- iii. Certification Engineers International Ltd., Mumbai
- iv. VCS Quality Services Pvt Ltd, Mumbai
- v. Bureau Veritas (India) Pvt Ltd, Mumbai
- vi. IRCLASS Systems & Solutions Pvt Ltd, Mumbai
- vii. ABS Industrial Verification (India) Pvt Ltd, Mumbai
- viii. International Certification Services Pvt Ltd, Mumbai
- ix. SGS India Pvt Ltd, Gurgaon
- x. TUV India Pvt.Ltd., Pune

Inspection and acceptance of bought out items/materials shall not relieve the Sub-Contractor from any of his responsibilities under this contract.

26.0 MISCONDUCT

26.1 The EIL/ MIL may at any time object to and require the Sub-Contractor to remove forthwith from the Site a supervisor or any other authorised representative or employee of the Sub- Contractor's subcontractor(s) or any person(s) deployed by Sub-Contractor or his subcontractor(s) (of Sub-Contractor), if, in the opinion of the EIL's/ MIL 's, the person in question has misconducted himself or his deployment is otherwise considered undesirable by the EIL/ MIL, the Sub-Contractor shall forthwith remove and shall not again deploy the person in question of the Work Site without the written consent of the EIL/ MIL.

26.2 The EIL/ MIL may at any time request the Sub-Contractor to remove from the Work/Site Sub-Contractor's supervisor or any other authorised representative including any employee of the Sub-Contractor or his Subcontractor(s) or any person(s) deployed by Sub-Contractor or his Subcontractor(s) (of Sub-Contractors) for professional incompetence or negligence or for being deployed for work for which he is not suited. The Sub-Contractor shall consider the EIL/ MIL request and may accede to or dis-regard it. EIL/ MIL, having made a request as aforesaid in the case of any person, which the Sub-Contractor has disregarded, may in the case of the same person at any time but on a different occasion, and for a different instance of one of the reasons referred to above in this Clause object to and require the Sub-Contractor to remove that person from deployment on the Works which the Sub-Contractor shall then forthwith do and shall not again deploy any person so objected to on the Works or on the sort of work in question (as the case may be) without the written consent of the EIL/ MIL.

26.3 The Sub-Contractor shall promptly replace every person removed, pursuant to this section, with a competent substitute.

27.0 FACILITIES FOR WORKMEN:

27.1 The Sub-Contractor shall make his own arrangements for the engagement of all workmen, local or otherwise, and for their transport, housing, feeding and payment.

27.2 The Sub-Contractor shall provide at Site adequate supply of drinking water and other water for use at Site.

27.3 If any illness of an epidemic nature breaks out, the Sub-Contractor shall comply with and carry out whatever regulations, orders and requirements that are imposed by the Government or the local medical or sanitary authorities for the purpose of promptly dealing with and overcoming it.

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27.4 The Sub-Contractor shall at all times take all reasonable precautions to prevent any unlawful riotous or disorderly conduct by or amongst the persons deployed for the works at site and for the preservation of peace and the protection of persons and property in the neighbour-hood of the work.

27.5 The Contractor shall ensure that the provisions of this Clause are complied with by his Sub-Contractors also.

28.0 FURTHER SUB-CONTRACTING

Provisions for further Sub-Contracting shall be as per Clause no. 9.14 of GCC.

Sub-Contractor will submit to EIL for approval the details of nominated Sub-Contractors as per **ANNEXURE- XIII of SCC.**

29.0 RESPONSIBILITY OF SUB-CONTRACTOR

29.1 In addition to the provisions of relevant clause of General Conditions of Contract (GCC) and associated provisions thereof, the Sub-Contractor shall also comply with the following:

- i) It shall be entirely the Sub-Contractor's responsibility to provide, operate and maintain all necessary construction equipments, scaffoldings and safety gadgets, cranes and other lifting tackles, tools and appliances to perform the work in a workman like and efficient manner and complete all the jobs as per time schedules.
- ii) Preparing approaches and working areas for the movement and operation of the cranes, levelling the areas for assembly and erection shall also be the responsibility of the Sub- Contractor. The Sub-Contractor shall acquaint himself with access availability, facilities such as railway siding, local labour etc. to provide suitable allowances in his quotation. The Sub- Contractor may have to build temporary access roads to aid his own work, which shall also be taken care while quoting for the work.
- iii) The procurement and supply in sequence and at the appropriate time of all materials and consumables shall be entirely the Sub-Contractor's responsibility and his rates for execution of work will be inclusive of supply of all these items.
- iv) Sub-Contractor should ensure following facilities at construction site during execution of job without any additional charge to EIL/Owner:
 - a) Sanitation facility by arrangement of Mobile toilet etc.
 - b) Suitable drinking Water facility
 - c) Temporary shelters in form of temporary shed

30.0 OTHERS MODIFICATIONS TO GCC

30.1 Change in definitions:

As per the revised definitions mentioned in this SCC, following is applicable:

- A. Wherever "Contractor" is indicated in the General Conditions of Contract and other parts of Bidding Documents, shall be replaced with "Sub-Contractor".
- B. Wherever "Sub-Contractor" is indicated in the General Conditions of Contract and other parts of Bidding Documents, shall be replaced with "Subcontractor of main Sub-Contractor (of EIL)".

30.2 Price Reduction due to delay in completion

Clause no. 13.2.1 of GCC stands modified to the extent as follows:

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- 30.2.1 Price reduction due to delay in completion shall be 0.5% of the Contract value per week or part thereof, subject to a maximum of 5% of the Contract value.
- 30.2.2 For the purpose of PRS, part of the week in clause **30.2.1** shall be considered as one week. For example, if a Contractor delays supply/ work by three weeks & two days, the same shall be considered as four weeks.
- 30.2.3 For the purpose of PRS, Contract value means total executed contract value (including all taxes & duties included in Sub-Contractor's contract value) on completion of work in line with contract, excluding cases of Short Closure/ Offloading.
- 30.2.4 In case Time extension is granted during execution of the contract pending detailed delay analysis, payment against RA bills shall be released to the Sub-Contractor without deducting PRS subject to the condition that Sub-Contractor submits the additional BG to cover the PRS amount. The Bank Guarantee for PRS shall be valid for six months and shall be extended based on the directions of Engineer-in-charge, if required. . Proforma of this BG shall be same as per the proforma of Advance Bank Guarantee.
- 30.2.5 However, in case of Short Closure/ Offloading, the Contract Value shall be executed value plus the work done at the risk & cost of the contractor plus EIL overhead charges.
- 30.2.6 In the event of multiple parts being awarded to one agency, PRS shall be levied for individual part separately corresponding to the respective contract values.

30.3 Payment against RA bills -

- 30.3.1 Sub-Contractor can raise any no. of RA bills in a month.
- 30.3.2 EIL may, at its sole discretion, release 75% payment of the RA bill within 7 days of receipt of RA bill by Finance duly certified by Engineer-in-charge and balance as per provisions of GCC.

30.4 SUSPENSION

- 30.4.1 Clause No. 26 of GCC stands modified to the extent as follows:

If the suspension is ordered for reasons not attributable to the Sub-Contractor, then:

- a. Beyond 5 days of continuous suspension or beyond 30 days of Cumulative suspension, Sub- contractor shall be entitled for an extension of the time equal to the period of suspension plus 25%.
- b. In case continuous Suspension exceeds 30 days, the Sub-contractor shall be entitled for both time and cost compensation. The cost compensation shall be worked out based on mutual discussions and acceptance.

30.5 CHANGE OF QUANTITIES

- 30.5.1 Clause No. 10.6 & 24.10 of GCC stands modified to the extent as below:

- A. The WORK covered under this CONTRACT having to be executed by the Sub-Contractor on an item rate quoted by him, EIL will not accept any proposals for changes in CONTRACT VALUE or extension in time on account of any such changes which may arise to the Sub-Contractor's scope of WORK as a result of detailed Engineering and thereafter during the execution of WORK. The only exception to this will be a case where EIL requests in writing to the Sub-Contractor to upgrade the SPECIFICATIONS or the size of any major pieces of equipments, plant or machinery beyond what is normally required to meet the scope of WORK as defined in the CONTRACT DOCUMENT.

In such cases, a change order will be initialled by the Sub-Contractor at the appropriate time for

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EIL's prior approval giving the full back-up data for their review and for final settlement of any impact on price within 30 (thirty) days thereafter.

- B. The ENGINEER-IN-CHARGE shall have to make any alterations in, omission from, additions to or substitutions for, the Schedule of Rates, the original specifications, drawings, designs and instructions that may appear to him to be necessary or advisable during the progress of the WORK and the Sub-Contractor shall be bound to carry out the such altered/ extra/ new items of WORK in accordance with any instructions which may be given to him in writing signed by the ENGINEER-IN-CHARGE, and such alterations, omissions, additions or substitutions shall not invalidate the CONTRACT and any altered, additional or substituted work which the Sub-Contractor may be directed to do in the manner above specified as part of the WORK shall be carried out by the Sub-Contractor on the same conditions in all respects on which he agreed to do the main WORK. The time of completion of WORK may be extended for the part of the particular job at the discretion of the ENGINEER-IN- CHARGE, for only such alterations, additions or substitutions of the WORK, as he may consider as just and reasonable. The rates for such additional, altered or substituted WORK under this clause shall be worked out in accordance with the following provisions: -
- i. If the rates for the additional, altered or substituted WORK are specified in the CONTRACT for the WORK, the Sub-Contractor is bound to carry on the additional, altered or substituted WORK at the same rates as specified in the CONTRACT.
 - ii. If the rates for the additional, altered or substituted WORK are not specifically provided in the CONTRACT for the WORK, the rates will be derived from the rates for similar class of WORK as are specified in the CONTRACT for the WORK. The opinion of the ENGINEER- IN- CHARGE, as to whether or not the rates can be reasonably so derived from the items in this CONTRACT will be final and binding on the Sub-Contractor.
 - iii. If the rates for the altered, additional or substituted WORK cannot be determined in the manner specified in sub-clause (a) and (b) above, then the Sub-Contractor shall, within 7 days of the date of receipt of instruction to carry out the WORK, inform the ENGINEER-IN- CHARGE of the rates which it is his intention to charge for such class of WORK, supported by analysis of the rate or rates claimed, and the ENGINEER-IN-CHARGE shall determine the rate or rates on the basis of the prevailing market rates, labour cost at schedule of labour rates plus 15% to cover sub-contractor's supervision, overheads and profit and pay the Sub-Contractor accordingly. The opinion of the ENGINEER- IN-CHARGE as to current market rates of materials and the quantum of labour involved per unit of measurement will be final and binding on the Sub- Contractor.
 - iv. Where the item of work will be executed through nominated specialist agency as approved by the ENGINEER-IN-CHARGE, then the actual amount paid to such nominated agency supported by documentary evidence and as certified by ENGINEER-IN-CHARGE shall be considered plus 15% (Fifteen percent) to cover all contingencies, overhead, profits to arrive at the rates.
 - v. Provisions contained in the Sub-clause (i) & (iv) above shall, however, not apply for the following: -
 - a. Where the value of additions of new items together with the value of alterations, additions/deletions or substitutions does not exceed plus (+) 50% or is not less than minus (-) 25% of the CONTRACT VALUE, the item rates in the Schedule of Rates shall hold good for all such variations between the above mentioned limits, irrespective of any increase/ decrease of quantities in the individual items of Schedule of Rates. Where the value of addition of new items together with the value of alterations, additions/deletions or substitutions reduces more than 25% of the contract value but is within the following limits the tenderer shall be paid compensation for decrease in the value of work, as follows:

S.No.	Range of Variation	Percentage compensation for decrease in the Contract Value
A.	Between (-) 25% up to & inclusive of (+) 50%	No increase/decrease applicable for the Schedule of Rates (The rates of the Schedule of Rates shall be valid for this increase/decrease).
B.	Beyond (-) 25% upto & inclusive of (-) 50%	For reduction beyond -25%, Sub-Contractor shall be compensated by an amount equivalent to 10% of the reduction in value of the contract as awarded. For example, if the actual contract value is 70% of awarded value, then compensation shall be 10% of (75-70) i.e. 0.5% of awarded contract value.

30.6 ALTERNATIVE DISPUTE RESOLUTION

30.6.1 Clause no. 25.2 and 25.3 of GCC of EIL shall stand modified as per Annexure-XV to SCC enclosed herewith which shall supersede over the provision of dispute resolution mentioned elsewhere in the Bidding Document.

30.6.2 EIL Conciliation Rules 2012: Engineers India Limited has framed the EIL Conciliation Rules 2012 in conformity with Part – III of the Indian Arbitration and Conciliation Act 1996 for speedier, cost effective and amicable settlement of disputes through conciliation. A copy of the said rules has been made available on EIL's web site www.engineersindia.com for reference.

30.6.3 Notwithstanding the existence of any dispute or arbitration in terms hereof or otherwise, the Sub-Contractor shall continue and be bound to continue and perform the works to completion in all respects according to the Contract (unless the Contract or Works be determined by the OWNER) and the Sub-Contractor shall remain liable and bound in all respects under the Contract.

30.6.4 Cl. 11 of Annexure-XV to SCC stands replaced with the following:

11.0 Sub-clauses 2 to 9 of this clause shall not be applicable in contracts where both the parties to the contract come under purview of AMRCD/AMRD mechanism.

11.1 If the Seller is a CPSU or CPSE or is a Govt. Department, any disputes or differences between the Seller and EIL hereto arising out of any notified claim of the Seller in terms hereof and/or arising out of any amount claimed by EIL (whether or not the amount claimed by EIL or any part thereof shall have been deducted from the final bill of the Seller or any amount paid by EIL to the Seller in respect of the work), then, following provisions shall apply;

11.2 In the event of any dispute or difference relating to the interpretation and application of the provisions of commercial contract(s) between Central Public Sector Enterprises (CPSEs)/ Port Trusts inter se and also between CPSE(s) and Government Department(s)/ Organization(s) (excluding disputes relating to Railways, Income Tax, Customs & Excise Departments), such dispute or difference shall be taken up by either party for resolution through Administrative Mechanism for Resolution of CPSEs Disputes (AMRCD) only as mentioned in DPE OM no. 05/0003/2019-FTS-10937, dated 14.12.2022 and the decision of AMRCD on the said dispute will be binding on both the parties.

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11.5) Further, vide DPE OM no. DPE-05/0002/2023-AMRCD, dated 25.07.2024, it is clarified that the interpretation and application of the provisions of commercial contract(s) in case of dispute/s between the following Organizations/ Departments shall be taken up under AMRCD only:

- i. CPSE and CPSE;
- ii. CPSE and Ministry / Department of Central Government;
- iii. CPSE and Public Authority/ Organization or University under the Central Government;
- iv. CPSE and State Governments/State PSUs/ Public authority/ Organization or University under any State Government.

30.7 INSURANCE

30.7.1 EIL/Owner have arranged the Marine Cum Erection All Risk Insurance (to be read as Annexure XVII of SCC) for the Project for permanent incorporation of materials and services.

All other Insurance provisions shall be as per EIL GCC. Additionally, following shall apply: -

- a. In all tenders, wherever the Sub-Contractor is required to maintain specified insurance policies in his scope, the same shall be in the joint name of Owner and Sub-Contractor. However, wherever the Sub-Contractor already has the insurance policies for their workers/equipments /vehicle, etc, proposed to be used at project site, the Sub-Contractor shall have the option either to get a new insurance policy in the joint name of Owner and Sub-Contractor or get the endorsement of existing policies from the insurers in the joint name of Owner and Sub-Contractor. Further, in case of insurance policies which are in the Owner scope, the same shall be in the name of Owner only.
- b. Without limitations of EIL's obligation and responsibilities, the responsibility and insurance provision of sub-contract shall be consistent with the contract and the subcontractor shall not carry any insurance which would duplicate any insurances provided by EIL/MIL. The Sub-contractor shall be responsible for ensuring to maintain insurance as required in the sub-contracts during the course of Sub-contractor's operation.
- c. Sub-Contractor shall ensure that all its personnel deployed under this contract have obtained additional insurance coverage under the Pradhan Mantri Suraksha Bima Yojna (PMSBY) and Pradhan Mantri Jeevan Jyoti Bima Yojna (PMJJBY) through the participating banks and submit the proof of such insurance coverage to the satisfaction of EIL. The cost of the insurance premium amount for both the above schemes shall be borne by the sub-contractor giving evidence / proof to EIL in this respect and Sub-Contractor shall suitably consider the same in their bid.

Details of these schemes are to be regulated continuously on yearly basis and the same should be renewed on each successive relevant date in the subsequent years.

30.7.2 Within 45 (30 days for submission of certificate of Insurance and 45 days for submission of policies) days of placement of LOA or before commencement of execution of Works, whichever is earlier, the Sub-Contractor without restricting in any manner any other provisions of the Contract, and in particular any such provision pertaining to his obligation, liability or responsibility shall take out and keep in force at his expenses the various insurance policies specified herein for the benefit of and in the join.

30.7.3 The names of the Owner/EIL and the Sub-Contractor against all risks with the exception of those war risks (in respect of which insurance cover is not available even with payment of additional premium) for physical losses or damages suffered by Works and Temporary Works or part of the Works upto the contract value thereof or such additional sum as may be specified in the Contract in such a manner that the Owner/EIL and the Sub-Contractor are covered.

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- i. from the commencement of the Works until the date of issue of Certificate of Completion and Acceptance (excluding the value of the part of the Works which are taken over by the Owner/EIL pursuant to the period when such part of the Works is in custody of the Owner) for loss or damage arising from a cause, occurring prior to the date of issue of Certificate of Completion and Acceptance, and for any loss or damage occasioned by the Sub-Contractor in the course of any operations carried.
- ii. During the guarantee period against any loss or damage arising from either the Sub-Contractor complying with his obligations under the Contract or for completing any outstanding work.

OR

For loss or damage in respect of the works completed by the Sub-Contractor prior to the commencement of the guarantee period.

30.7.4 The Sub-Contractor shall take out and keep in force adequate Insurance to cover all risks. (a) In respect of their personnel deputed to work under the Contract. (b) In respect of their own as well as hired equipment (to the extent of their insurance interest) tools, materials, marine spreads, vessels, barges, crafts, ships and operational facilities used during the entire period of their engagement in connection with the Contract to the insurable value of such constructional plant, equipment and other things. Owner/EIL shall have no liability whatsoever in this regard. Such insurance policies of the Sub-Contractor shall embody the following clauses:

"The Insurers hereby waive their rights of subrogation against the MIL/EIL, or any of their employees or their subsidiaries, affiliates or assigns."

30.7.5 Sub-Contractor shall suitably insure his constructional plant and equipment and other things brought to the Site including floating craft against the risk of removal of wreck under statute. Such policy/cover should be extended to include removal of wreck/debris in the event MIL/EIL requires Sub-Contractor to do so. Any limit of liability specified by such policy shall not relieve the Sub-Contractor from any enhanced actual liability in carrying out his obligations.

30.7.6 Under the Owner's package policy, privilege is granted to the Assured to release any individual, firm or corporation for whom or with whom the assured is performing operation or who is performing operations for the Assured, under the Contract or otherwise, from liability for loss or damage (1) caused by an accident or occurrence taking place after the granting of said release and (2) arising out of or in connection with said operations.

When privilege above is exercised by the Assured Insurers hereunder hereby waive their rights of subrogation against such individual, firm or corporation, their subsidiaries factors, or assigns, but only with respect to loss or damage to which the above release of liability applies.

30.7.7

- a. Sub-Contractor shall include in his respective contracts with the Sub-contractor of main Sub-Contractor such clause(s) pertaining to insurance, indemnity and waiver of subrogation that appear in the Contract with the Owner/EIL. This, however, shall not relieve Sub-Contractor from his responsibilities under this Contract.
- b. Without limitations of the Sub-Contractor's obligation and responsibilities, if the Sub-Contractor sub-contracts any part of the work, the responsibility and insurance provisions of each sub-contract shall be consistent with the Contract and the Sub-contractor of main Sub-Contractor shall not carry any insurance which would duplicate any insurances provided by the Sub-Contractor or the Owner/EIL. The Sub-Contractor shall be responsible for ensuring that sub-contractors of main Sub-Contractor maintain insurance as required in the sub-contracts during the course of operation of Sub-contractor of main Sub-Contractor.

30.7.8 Policies to be taken out by the Sub-Contractor: The Sub-Contractor and the Owner/EIL shall be covered by insurances to be taken out and maintained by the Sub-Contractor as set forth below:

i. Automobile and Transportation Liability Insurance

Covering use of all automobiles and transport such as cars, trucks, aircraft, launches, Tugs, Barges etc. used by the Sub-Contractor or its sub-contractors (Whether or not owned by them) in connection with the execution of the Works.

ii. Workman's Compensation

In accordance with the statutory requirements applicable.

iii. Such other insurances at actual cost to MIL as may be specifically agreed by the Parties to the extent insurable risks not covered by the above policies (where MIL shall be the beneficiary) providing coverage for all direct loss cost by defective design, material, workmanship (including defective construction or erection) within the control of Sub-Contractor. Specific insurance for bodily injury and personal liability insurance (excluding that to third parties) and endorsements for such items as elevator and hoist liability may also be included.

30.7.9 The Owner/EIL and the Sub-Contractor's sub-contractor shall be named as additional insureds under all insurance policies, taken out by the Sub-Contractor specifically for this Contract pursuant to the above sub-clauses except for the Workmen's Compensation and Employer's Liability Insurances, and all insurer's right of subrogation against such additional insureds for losses or claims arising out of the performance of the Contract shall be waived under such policies.

In the event there is any misrepresentation, non-disclosure, breach of express/implied warranties, unlawful activity, breach/non-fulfillment of any terms and conditions of the policy or any willful misconduct on the part of the Sub-Contractor which may result in automatic termination, expiry, or penalty under the policy, the Sub-Contractor shall be solely responsible for the same, and bear all such consequences. Further in the event of the Sub-Contractor has failed to insure (for whatever reason), or has in adequately insured, he alone shall bear the consequences of not being insured or protected fully by insurance. The Sub-Contractor shall also be responsible for the various deductible excess or fractions stated under his insurance policies.

The sub-contractor shall take policy with minimum deductible as prescribed for the policy (ies).

Note: Deductibles shall be as per IRDA and shall be on account of Sub-Contractor as part reimbursable element.

30.7.10 The Sub-Contractor shall prior to commencing any relevant part of the Works deliver to the Owner/EIL, copies of the Insurance Policies as evidence that the required policies are in full force and effect.

It shall be the responsibility of the Sub-Contractor to pay the premium in time and to keep the policies of insurance, as required by the Contract, valid throughout the period of execution of Works including extended period at their cost. The Sub-Contractor shall wherever required produce to the Owner/EIL the policy (ies) of insurance. Provided always that in respect of any person employed by and Sub-contractor of the main Sub-Contractor, the Sub-Contractor's obligation to insure as aforesaid under the sub-clauses shall be satisfied if the Sub-contractor of the main Sub-Contractor shall have insured against the liability in respect of such persons in such manner that the Owner/EIL is indemnified under the policy but the Sub-Contractor shall require such Sub-contractor of the main Sub-Contractor to produce to the Owner/EIL or the Owner's/EIL's Representative when required such policy for insurance and the receipt for the payment of the current premium. The policy (ies) shall provide that not less than 21 days written notice shall be given to the Owner/EIL by all insurers prior to any cancellation of material modification of the policy (ies).

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The Sub-Contractor shall produce a certificate from insurance company to the effect that all premium under the policy have been paid and indicating validity of the policy.

All insurance policies of the Sub-Contractor shall embody the following clause:

“The Insurers hereby waive their right of subrogation against the MUNITIONS INDIA LIMITED / ENGINEERS INDIA LIMITED, or any of their employees or their subsidiaries, affiliates and assignees.”

Such insurance shall be effected with an insurance company incorporated and registered in India. The insurance cover shall apply even when the loss or damage might have occurred due to the negligence of the Owner/EIL, its authorized representative or its workmen or any consultancy inspection or Certification agency working for the Owner/EIL. The Sub-contractor shall, in all respects comply with any conditions stipulated in the Insurance policies which are required to take out under the Contract.

Note: Policies of insurance shall be provided in respect of those policies taken out specifically for this project. With regard to those other corporate policies of Insurance in respect of Contractor's worldwide cover, Certificates of Insurance from the Insurance Company shall be provided. Also Sub-Contractor shall provide certified statements from the Insurance Company that premia have been paid and policies are in force.

30.7.11 Remedy on Sub-Contractor's Failure

Should the Sub-Contractor fail to take out and/or keep in force the insurance policies referred to above, or any other insurance which he may be required to effect under the terms of the Contract then the Owner/EIL may at its option take out and keep in force insurance considered appropriate and necessary in the circumstances and pay such premium or premia as may be necessary for that purpose and from time to time deduct the amount so paid, by the Owner/EIL as aforesaid with interest from any monies due or which may become due to the Sub-Contractor or recover the same as a debt due to the Contractor. However, if the policy lapses due to any reason, then the loss, damages and all liabilities on account of the policy having lapsed shall be to the account of the Sub-Contractor, nothing in this clause shall be construed by the Sub-Contractor as a waiver of his obligations to insure as required under the Contract. Further nothing in this clause shall impose upon the Owner/EIL any obligation to insure on behalf of the Sub-Contractor. The Owner/EIL may exercise its option to do so as stated herein but failure to exercise such option shall not entitle the Sub-Contractor to seek damages from the Owner/EIL or eschew responsibilities under the Contract including his duties to insure and keep valid insurance policies.

30.7.14 Approval by the Owner/EIL of any insurer or terms of insurance proposed by the SubContractor shall not relieve the Sub-Contractor of any of its obligations or liability under or arising from this Contract or generally at law.

30.7.15 The terms of insurance shall include a provision whereby in the event of any claim being brought or made against the Owner/EIL in respect of which the Sub-Contractor would be entitled to receive indemnity under the policy, the insurer will indemnify the Owner/EIL against such claims and any costs charges and expenses in respect thereof.

30.7.16 The Sub-Contractor shall prepare and follow-up any claims made under the policies effected as required under the contract at the sub-Contractor's risk and cost. The Sub-Contractor shall not give any release or make any compromise with the insurer without the prior written consent of the Owner/EIL, in respect of the insurance claims in which Owner's/EIL's interest is involved, which consent shall not be unreasonably withheld.

30.7.17 Checklist for Insurance Policies.

(Caution: Checklist is not exhaustive one and hence sub-contractors need to peruse the entire insurance clause for its compliance)

1. List of Policies to be taken by EIL:

- a. Contractor's All Risk Insurance
- b. Cargo Transit Insurance.
- c. Third Party Liability Insurance.

2. List of the Policies to be taken Out by Sub-Contractor:

- a. Automobile and Transportation Liability Insurance.
- b. Workmen's Compensation Insurance / Employer's liability Insurance
- c. Insurance Policy for CONTRACTOR'S Constructional Plant and Equipment and such policy to include removal of Wreck / Debris.
- d. Any other policies not mentioned above but required to be taken on the basis of specific nature of Contract as mentioned in the contract.

Note: In cases where Sub-Contractors content that their Corporate Policies with worldwide coverage meets the insurance requirements of the contract in respect of Policies from (a) to (d), Sub-Contractor needs to ensure that all the conditions mentioned in the contract in respect of insurance are complied with.

3. Principal Assured

The following are to be included as Principal Assureds in the Insurance Policies (except in case of Workmen's Compensation / Employer's Liability Insurance):

- (a) Munitions India Limited and Engineers India Limited, and Sub-Contractor's name (as appearing in the bid document / LOA)
- (b) Parent and/or Subsidiaries and/or Affiliated and/or associated and/or inter-related Companies of the above as they are now or may hereafter be constituted and their Directors, Officers and Employees, while acting in their capacities as such.

4. Additional Insured

The following are to be included as Additional Insured in the Insurance Policies (except in case of Workmen's Compensation / Employer's Liability Insurance):

- (a) Any other company, firm, person or party (including Sub-Contractors and/or its Sub-contractors and/or manufacturers and/ or suppliers) with whom the below mentioned persons have entered into written contract(s) directly in connection with the Project:
 - i. Munitions India Limited /Engineers India Limited,
 - ii. Parent and/or Subsidiaries and/or Affiliated and/or associated and/or inter-related Companies of the above as they are now or may hereafter be constituted and their Directors, Officers and Employees, while acting in their capacities as such.
 - iii. Project Managers
 - iv. Sub-Contractor

5. Waiver of Subrogation

Policy should have Waiver of Subrogation against Principal Assureds (as mentioned in point 3 above) and Additional Insured (as mentioned in point 4 above) and Contractor.

6. Location of the Proposed Project (in Contractors All Risk Policy)**7. Project Description (Name) (in Contractors All Risk Policy).**

8. **Sum Insured** (Physical Damage portion of Contractors All Risk Policy). Not less than Estimated Final Contract Value as per NOA/Contract distributed in all currencies as mentioned in NOA/Contract.
9. **Period of Insurance** (Contractors All Risk Policy) To be valid up to scheduled completion date of contract, with provision for an extended maintenance coverage for Contractor's liability in respect of any loss / damage occurring during the warranty period.

10. **Deductibles**

Deductible shall be as per IRDA and shall be on account of EIL as part of Reimbursable elements.

11. **Loss Payee Clause**

The Insurance Policies should mention the following in Loss Payee Clause: "In respect of Insurance claims in which MIL's interest is involved, written consent of MIL will be required."

12. **Compliance with Sec 25(1) of "The General Insurance Business (Nationalization) Act, 1972"**

Section 25(1) of "The General Insurance Business (Nationalization) Act, 1972" is reproduced below:

"No person shall take out or renew any policy of insurance in respect of any property in India or any ship or other vessel or aircraft registered in India with an insurer whose principal place of business is outside India save with the prior permission of the Central Government"

The above requirement of aforesaid Act needs to be complied with by the Contractor wherever the aforesaid provisions of Act apply, and compliance confirmation submitted.

13. **Written Notice**

All Insurance Policies should provide that not less than 21 days written notice shall be given to the MIL by the Insurance Company prior to any cancellation or material modification of the Policy (ies).

14. **All insurance policies should mention the following:**

"Notwithstanding anything to the contrary elsewhere in the Policy, it is understood and agreed that Insurance cover shall apply even when the loss or damages might have occurred due to the negligence of the MIL, its authorized representative or its employees or its workmen or any consultancy inspection or Certificate Agency working for MIL".

15. **Taking out various insurance policies and payment of premium**

After the award of the contract, the Sub-contractor or its subcontractors will be required to take insurance policy as per the provisions of the contract and the insurance should come in to force from the date of commencement of works.

30.8 DEFECT LIABILITY PERIOD

The Defect Liability Period shall be a period of 12 (twelve) months from the date of Completion mentioned in the Completion Certificate inline with clause 18.1 of GCC.

- 30.9 "Effective Date" referred in the General Conditions of Contract shall mean the date of award of contract to the successful Bidder.

30.10 Works Programme [Sub-clause 9.9.1 of EIL GCC]

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The Contractor shall submit a detailed Works Programme to the Engineer-in-Charge not later than 30 (thirty) days from the Effective Date. The Contractor shall also submit a revised Works Programme whenever the Engineer-in-Charge finds that the previous Works Programme is inconsistent, due to any reasons, with actual progress as provided in the Specifications/ scope of Work. The contractor shall plan the activities, which is optimum for the completion of works within the schedule time. Weightage of the activities will be determined through the Construction Planning system of EIL (EIL CP), which will be based on efforts required to complete an activity and will be binding on the Contractor.

30.11 Progress Reports [Sub-clause 9.10.1 of EIL GCC]

Contractor shall submit the Daily Progress Report (DPR) online through the Web based module of EIL, which shall be extended to the Contractor for the sole purpose of input / uploading of the data for DPR; and separate DPR (in hard copy) shall not be submitted. The approved copy of DPR, after review by EIL, will be shared with the contractor for reference. Based on this DPR, the Contractor shall submit to the Engineer-in-Charge, by the end of each month, Monthly Progress Report which shall, amongst other things, highlight actual or potential departures from the Works Programme and state the measures which the Contractor proposes to take in order to make good or reduce any delay.

31.0 DELETED

32.0 GENERAL REQUIREMENTS FOR RADIOGRAPHY & OTHER NDT:

Sub-Contractor shall appoint radiography/ NDT agency (ies) only after acceptance of such agency(ies) by MIL/EIL. However, acceptance of radiography/ NDT agency by MIL/EIL shall not absolve the Sub-Contractor of his responsibility to execute radiography work as per requirements of the Contract.

32.1 Sub-Contractor shall mobilize Radiography/ NDT agency at site along with adequate number of radiography resources/ NDT equipments & appliances, commensurate with the welding activity and quantum of Radiography/ NDT work load to avoid delays in Radiography/ NDT and consequent generation of back log. In the event of generation of back log leading to Delay/ Holdup of subsequent, activities MIL/EIL has right to engage additional agency for carrying out the radiography at the risk and cost of Sub-Contractor including 100% overhead charge.

32.2 Date and extent of mobilization of radiography/ NDT agency/resources shall be agreed by the Sub-Contractor and the Engineer-in-Charge at the start of work.

32.3 Radiography Check Shots

- a) To verify that radiographs are being taken on the prescribed / selected welds /spots only, 5% of already radiographed spots shall be selected by the Engineer-in-Charge or his designated person for check shots. The check shots shall be taken up before any further radiography work.
- b) The Sub-Contractor will be paid for the check shots at the quoted rates if no variation is found. If mismatch / variation is found in any of the check shot as per para 31.23a), Sub- Contractor shall have to take re-radiography of the entire lot represented by mismatched check shot (a days production or more as decided by Engineer In-Charge). In such cases, no payment will be made for the check shots as well as the re-radiography of the entire lot represented by the check shot.
- c) The entire lot represented by mismatched check shot (a days production or more as decided by Engineer In-Charge). In such cases, no payment will be made for the check shots as well as the re-radiography of the entire lot represented by the check shot.
- d) In the event of any non-matching / variation is observed in re-radiography of the entire lot as per para 31.3b) above with reference to the earlier radiographs taken, the radiography agency shall

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be forthright debarred from site. Sub-Contractor shall then carryout re- radiography up to maximum of 100% of all the prescribed / selected welds/ spots radiographed by the debarred radiography agency (as per direction of the Engineer In- Charge) at his own cost by engaging a separate Radiography agency acceptable to MIL/EIL. The process for verification of radiographs through check shots shall be continued as per clause 31.3a) above from the lots selected by the Engineer In- Charge till

2(two) consecutive lots are found with matching check shot radiographs to the satisfaction of EIL/ MIL.

33.0 OTHER REQUIREMENTS

33.1 The Sub-Contractor shall not use or occupy any part of the Works unless its use or occupation has been agreed to by the EIL/MIL in writing.

33.2 Hydrocarbons (other than lubricating oils and the like) shall not be introduced to the Work until Sub-Contractor has received EIL approval in writing to do so.

33.3 EIL / Owner (MIL) shall have the right to instruct the work at site / fabrication yard at site and shall be entitled to ascertain whether the work is carried out in accordance with the requirements of the contract, including the right to inspect the work at all stages of its performance.

33.4 Sub-contractor shall arrange proper security arrangements at construction sites, warehouse, laydown and fabrication yard allocated to them by deploying suitable agency to accomplish all necessary actions to maintain safe custody of all Equipment, Bulk Materials, supplies etc. and to restrict entry of any unauthorized person in the Worksite. Sub-contractor shall ensure the agency deployed for security follows all procedures related to security of the Worksite enforced by Owner, or required or mandated by Governmental Authority. Cost towards such arrangements shall be borne by Sub-contractor.

34.0 STATUTORY APPROVALS

34.1 Obtaining statutory approvals, required as defined in Sub-contractor's scope under Technical Scope of work, shall be the responsibility of the Sub-contractor. Sub-Contractor shall arrange the inspection of the works by the authorities and necessary co-ordination and liaison work in this respect. The application on behalf of the EIL for submission to relevant authorities along with copies of required certificates complete in all respects shall be prepared and submitted by the Sub-Contractor well ahead of time so that the actual construction/ commissioning of the work is not delayed for want of the approval/inspection by concerned authorities.

34.2 Statutory fees paid, if any, for all such inspections and approvals by authorities shall be deemed to be included in the quoted prices, if not specified otherwise.

34.3 Any change/ addition required to be made to meet the requirements of the statutory authorities shall be carried out by the Sub-Contractor free of charge. The inspection and acceptance of the work by statutory authorities shall however, not absolve the Sub-Contractor from any of his responsibilities under this contract.

34.4 All statutory approvals other than specified under 34.1 above shall be obtained by EIL and provided to the Sub-contractor.

35.0 TEMPORARY FIXTURES

Before erecting temporary shelters like sheds or tents anywhere within the plant premises, written permission of the concerned be obtained. Temporary fixtures like; sheds, tents, etc. shall be erected in conformity with normal safety standards. Thatched roof to such fixtures will not be permitted.

Temporary piping, house connections and electrical wiring must be laid in such manner that they may not

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cause tripping or hitting hazard. All precautions should be taken to ensure that any temporary electrical wiring used within the Project Area would not cause spark or shock.

All necessary / required precautions shall be taken and all HSE norms of Company shall be complied with.

36.0 HEALTH, SAFETY AND ENVIRONMENT (HSE) MANAGEMENT

36.1 HSE Compliance

36.1.1 Safety is to be given prime importance. During construction, Sub-Contractor shall strictly follow the safety procedures, precautions & norms as per provisions of Technical Section, EIL specifications on Health, Safety and Environment (HSE) Management along with Safety Instructions and Procedures of MIL-HEF are enclosed as ANNEXURE-XIV.

36.1.2 The Sub-Contractor shall also be responsible to comply with code requirements of International Standard Organization (ISO), Occupational Safety & Health Administration (OSHA), ISO-14000 series, American Petroleum Institute (API) RP and other relevant international practices. In case of conflict between the requirements of the various specifications and/or the requirements specified in the bid document, the more stringent requirement shall be followed.

36.1.3 In case of noncompliance, Engineer-In-Charge shall give notice to the Sub-Contractor. In case of repeated failure of the Sub-Contractor, Engineer- In- Charge is free to take actions such as withholding of bills, heavy penalty etc. The quantum of such actions will be decided by the Engineer- In- Charge, considering the contract conditions.

36.1.4 The Sub-Contractor shall establish document and maintain an effective Health, Safety and Environment (HSE) management system. After the award of the contract, detailed Health, Safety and Environment (HSE) programme to be followed for execution of contract under various divisions of works will be mutually discussed and agreed to.

The Sub-Contractor should be required to:

- Have in place a Safety Management System, approved by a recognized, approved authority.
- Prepare a project-specific Safety Plan for each Site
- Implement the Safety Plans.
- Ditto the above for Environmental Management

36.1.5 In case, Sub-Contractor fails to follow the instructions of Engineer-in-charge with respect to above clauses, next payment due to him shall not be released unless until he complies with the instructions to the full satisfaction of Engineer-in-charge.

36.2 SAFETY/FIRE PROTECTION

36.2.1 Sub-Contractor shall take all necessary measures to protect the work and Workmen against accidents and occupational disease. They shall observe and comply with all Governmental safety regulations as well as EIL's/ MIL's and accepted industry safety practices as required for this work.

36.2.2 The Sub-Contractor will be required to demonstrate that:

- i. the management systems and the installation are adequate to ensure that the design and the operation of the installation and the equipment are safe;
- ii. the potential hazards of the installation and the risks to personnel and environment have been identified and appropriate controls provided;
- iii. adequate provision is made for ensuring, in the event of a major emergency affecting the installation, the safe evacuation and rescue of personnel and
- iv. the statutory and Company requirements relating to safety and pollution control measures are complied with.

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36.2.3 Sub-Contractor shall conduct a Safety Studies Methodology which shall be completed and submitted to Company Further, the Sub-Contractor shall implement the findings of the Safety Studies without impact on Schedule or Contract Price.

36.3 Rules and Regulations

Sub-Contractor shall observe national and local laws, ordinances, rules and regulations pertaining to the Works and shall be responsible for extra costs arising from violations of same.

The Sub-Contractor shall not do any exploratory excavations, including drilling/boreholes, without the previous written permission of the Company's Representative.

36.4 Watching and Lighting- Not Applicable

36.5 Safety Audits: Not Applicable

36.6 Safety Procedure:

36.6.1 Sub-Contractor shall comply with Owner's guidelines related to Safety Procedures.

36.7 Deleted

37.0 TERMINATION

37.1 In addition to the provisions of clause no. 32 of GCC, following shall also be applicable in case termination due to Sub-contractor's default:

The methodology for processing Cancellation for default shall be as follows:

- A. Any material breach in contractual obligations shall be dealt on mutual discussion basis, so as to correct breach. In case of failure to correct the breach, EIL/ Owner shall initiate Termination action as per the contract.
 - B. In case of non-submission of CPBG within one month beyond the period stipulated for it, coupled with non-mobilization / non-performance within the period stipulated for the same, the Termination action along with other contractual penal provisions shall be initiated, as per the Contract provisions.
 - C. Further, in case of submission of CBPG within scheduled period, but Sub-Contractor being at default in terms of Contract, a) above shall be applicable.
 - D. In case of occurrence of any of the above specified events, Sub-Contractor shall be understood to have defaulted and the EIL/ Owner shall have the right to terminate the Contract, at its sole and absolute discretion by issuing a Show Cause notice of 15 calendar days to the Sub-Contractor, stating the reason and the intention of EIL/ Owner to terminate the Contract and to take other penal actions in terms of the Contract including extant policy for Suspension/ Banning of EIL/ Owner.
 - E. The Sub-Contractor may also request for a personal hearing.
 - F. EIL/ Owner based on the Sub-Contractor's response to the Show Cause Notice and the personal hearing, shall decide the action regarding Termination and/ or Suspension / Banning or otherwise. G.
- The decision taken as above shall apply to both Termination as well as Suspension / Banning.
- H. The Interest rate applicable as per b) above shall be as per Bid Data Sheet (BDS).
 - I. In case Contract awarded for the tendered work have to be terminated due to Sub-Contractor's default and a separate Tender have to be floated to get the remaining/ complete work executed, such defaulting Sub-Contractor will not be considered for Tenders issued for the refloated works of same project.

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37.2 DELETED

38.0 PUBLIC PROCUREMENT POLICY FOR MICRO & SMALL ENTERPRISES (PPP-MSEs), 2012

38.1 EIL is committed to promotion and development of micro and small enterprises Accordingly; bidders are also encouraged to promote the same by considering MSE sub-suppliers/ sub- contractors to the extent possible under the Orders/ Contracts awarded on them EIL. All efforts shall be made by bidder to encourage procurement thru MSEs (holding valid certificate) through their Sub orders/ Sub contract procurement. The successful bidder shall provide the following only for the purpose of reporting.

- i) Monthly Reports for purchase of material/services/ sub-contracts (from MSE vendors) shall be submitted by bidder to..... (Name of CPSU).
- ii) The report shall be signed by authorised person of contractor (Successful Bidder).
- iii)

Report shall be submitted in the following format.

Sl. No.	Sub- Supplier/ Subcontractor	Work order no. & date	Item Description	Amount (In Rs)	Category of MSE Gen/ SC/ ST/ Women	MSME Status Micro/ Small with code	Remarks

38.2 Government of India has implemented the Trade Receivables Discounting System (TReDS). TReDS is an institutional mechanism set up in order to facilitate the financing of trade receivables of MSMEs from corporate buyers through invoice financing by multiple financiers. EIL is already registered on the following TReDS Platforms:

Name of the Company	Name of The Platform	Web Address	Address	Contact person
A.TREDS Limited	Invoicemart	https://www.invoicemart.com/	11th Floor, Office No A-3, Ashar IT Park, Road No 16Z, Wagle Industrial Estate, Thane, Maharashtra, 400604	Mr. Ankur – 8447308425
Receivables Exchange of India Limited	Trade Receivables Discounting System (TReDS)	http://www.rxil.in/	Trade Centre (Vatika Business Centre), First Floor (Unit No.2), Office No.14, Bandra Kurla Complex, Bandra (East), Mumbai – 400051. Maharashtra	Ms. Ruchi Agarwal 9560793437
Mynd Solutions Private Limited	M1xchange	https://www.m1xchange.com/	280, Udyog Vihar, phase-IV, Gurgaon, Haryana, 122001	Mr. Dipanshu 9711008042

MSME bidders are requested to register on the TReDS platforms.

39.0 POLICY FOR PROVIDING PREFERENCE TO DOMESTICALLY (INDIAN) MANUFACTURED IRON & STEEL PRODUCTS IN GOVERNMENT PROCUREMENT (DMI&SP)

Refer Clause No. 37 of ITB.

40.0 POLICY TO PROVIDE PUBLIC PROCUREMENT (PREFERENCE TO MAKE IN INDIA) (PPP- MII):

Refer Clause No. 37 of ITB.

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41.0 DISTINCTION BETWEEN SUBSTRUCTURE AND SUPERSTRUCTURE

To distinguish between work in substructure and superstructures, the following criteria shall apply:

- 41.1** For all Equipment pedestals, pipe racks, other foundation and R.C.C. Structures, work done upto 300 mm level above Highest Pavement Point / Finished Floor Level will be taken as work in substructure and work above this level will be treated as work in superstructures and payments would be made accordingly.
- 41.2** For Buildings only, all works upto level corresponding to finished floor level (Ground Floor) shall be treated as 'Work in substructure ' and all works above the finished floor level shall be treated as "Work in superstructure".
- 41.3** Irrespective of what has been stated above, all pavements, R.C.C. Retaining wall, all pipe sleepers and any similar item would be taken as work done in substructure irrespective of locations, nomenclature and levels given anywhere.

Where not specifically pointed out all works in Cellars/ sumps, Drains, Manholes, Tank Pads, Cable trenches, or such similar item would be taken as work in substructure.

42.0 EXTENDED WARRANTY

NOT APPLICABLE FOR THIS TENDER.

43.0 OUTBREAK OF PANDEMIC

- 43.1** In case of any outbreak of pandemic during the execution of the contract, sub-contractor to follow all guidelines/SOP's issued by central govt /state govt/local authorities. Sub-Contractor to also submit compliance report to Owner/EIC. Sub-Contractor to note that quoted price is inclusive of this provision & no extra compensation on this account shall be admissible.

44.0 UPLOADING OF INVOICE IN INVOICE PORTAL

Suppliers and Service Providers shall upload the scan copy of invoices and other documents as required in the Letter of Acceptance/Purchase Order/Work Order on the EIL Invoice Portal to enable EIL to speed up and cut down on the processing and payment cycle. Post uploading, all correspondence between EIL and Suppliers/Service Providers will be through the portal. Suppliers/Service providers can track the status of the uploaded invoices through the portal.

A user guide on the operation of the portal is available on log in. URL of the portal is <https://www6.eil.co.in/invoiceportal/>

Registered Supplier/Contractor in EIL

Registered Supplier/Contractor can Login with existing Supplier/Contractor code using the radio button.

Non-Registered Supplier/Contractor

Non-Registered Supplier/Contractor can Login with PAN No. and generate the password using the radio button.

45.0 EMPLOYMENT OF LOCAL RESOURCES

The Contractor shall ensure that local agencies/labour, skilled and/or unskilled, to the extent available shall be employed in this work. In case of non-availability of suitable labour in any category out of the above persons, labour from outside may be employed.

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The contractor shall not recruit personal of any category from among those who are already employed by the other agencies working at site but shall make maximum use of local labour available.

46.0 CORRUPT AND FRAUDULENT PRACTICES

Provisions are as per clause 2.0 of Instructions to Bidder.

Clause for Alternative Dispute Resolution

1.0 Alternative Dispute Resolution - Conciliation & Arbitration

1.1 If Any dispute or difference or disagreement arises between the parties out of any notified claim of the SELLER/ CONTRACTOR included in his final bill and /or arising out of any amount claimed by the EIL (whether or not the amount claimed by the PURCHASER or any part thereof shall have been deducted from the Final bill of the supplier/ Contractor or any amount paid by the EIL to the SELLER/ Contractor in respect of the work) or arises out of or in connection with the validity, application or interpretation of the Contract/ Purchase order (the “Dispute”), the Parties shall endeavour in good faith to resolve the Dispute through negotiation within 7 (seven) days of a written notice setting out the nature of such Dispute.

1.2 In the event that any Dispute is not resolved between the Parties pursuant to Clause 1.1 within 21 (twenty-one) days of receipt of the notice under Clause 1.1, then such Dispute shall be referred to Conciliation as per clause 1.3 below.

1.3 Dispute Resolution through Conciliation by Outside Expert Committee

1.3.1 Engineers India Limited has framed the EIL Conciliation Rules 2012 in conformity with Part – III of the Indian Arbitration and Conciliation Act 1996 for speedier, cost effective and amicable settlement of disputes through conciliation. A copy of the said rules has been made available on EIL’s web site www.engineersindia.com for reference.

1.3.2 Any dispute(s)/difference(s)/issue(s) of any kind whatsoever between/ amongst the Parties arising under/ out of/ in connection with this contract, which cannot be mutually resolved within a reasonable time, shall be settled in accordance with the aforesaid EIL Conciliation Rules 2012. This shall also include all such issues where Engineer-in-Charge’s decision is said to be final & binding on any issue raised by the Contractor.

1.3.3 In case of any dispute(s)/ difference(s)/ issue(s), a Party shall notify the other Party (ies) in writing about such a dispute(s) / difference(s) / issue(s) between / amongst the Parties and that such a Party wishes to refer the dispute(s)/ difference(s)/ issue(s) to Conciliation. Such Invitation for Conciliation shall contain sufficient information as to the dispute(s)/difference(s)/ issue(s) to enable the other Party (ies) to be fully informed as to the nature of the dispute(s)/ difference(s)/ issue(s), the amount of monetary claim, if any, and apparent cause(s) of action.

1.3.4 The Parties shall freeze claim(s) of interest, if any, and shall not claim the same during the pendency of Conciliation proceedings. The Settlement Agreement, as and when reached/agreed upon, shall be signed between the Parties and Conciliation proceedings shall stand concluded on the date of the Settlement Agreement.

1.4 In the event that any Dispute between the Parties is not resolved pursuant to Clause 1.3, then such Dispute shall be referred to Arbitration as per clause 1.5 below.

1.5 Dispute Resolution through Arbitration

1.5.1 The arbitration will be conducted as per the Arbitration & Conciliation Act, 1996. The arbitral tribunal shall comprise of a sole arbitrator whom shall be appointed by EIL. The place of arbitration for any Disputes and Related Disputes shall be Delhi (save and except where otherwise specified under the Main Contract for the Related Dispute, in which event the place of arbitration shall be the place of arbitration for such Related Dispute). The language to be used in the arbitral proceedings shall be English. The arbitral award shall be final and binding upon both the Parties.

1.5.2 Responsibility of payment for all costs of arbitration, excepting counsel fees, shall be as per the arbitration award.

1.6 While any Dispute under this Contract/ Order is pending; and except where this Contract/ Order has been terminated in accordance with the terms of this Contract/ Order, the Parties shall continue to perform all of their respective obligations under this Contract/ Order without prejudice to the final determination in accordance with the provisions under this clause 1.0.

1.7 Where, in EIL's absolute discretion, it is beneficial for the completion of the Facility for any Dispute between EIL and the Contractor/ Seller, in respect of which an arbitration notice has been given, to be resolved in the same arbitration proceedings as a dispute between EIL and any other party or parties

engaged in relation to the completion of the Facility (the "Related Dispute") then:

- (a) if a notice to concur in the appointment of an arbitrator has been served in the Related Dispute, the Contractor/ Seller hereby agrees that, at EIL's sole option, the Dispute between EIL and the Contractor/ Seller shall be referred to the arbitrator appointed or to be appointed in respect of the Related Dispute and be determined at the same time as such Related Dispute;
- (b) where an arbitrator has already been appointed in connection with the Related Dispute, the Contractor/ Seller hereby agrees that, at EIL's sole option, the Dispute between EIL and the Contractor/ Seller shall be referred to and be determined by the arbitrator so appointed contemporaneously with the Related Dispute.

2.0 Settlement of dispute between Govt. Dept./ Public Sector Undertaking

- 2.1 If the Contractor/ seller is a CPSU or CPSE or is a Govt. Department, any disputes or differences between the Contractor/ seller and EIL hereto arising out of any notified claim of the Contractor/ Seller in terms hereof and/or arising out of any amount claimed by EIL (whether or not the amount claimed by EIL or any part thereof shall have been deducted from the final bill of the Contractor or any amount paid by EIL to the Contractor in respect of the work), then in suppression of the provisions of clause no. 1.0 above, the following provisions shall apply, namely; such disputes or differences shall be resolved amicably by mutual consultation or Conciliation or through the good offices or empowered agencies of the Government.
- 2.2 In the event that any Dispute does not resolved between the Parties is not resolved amicably by mutual consultation, then such Dispute shall be referred to Conciliation as per clause 1.3 above.
- 2.3 In the event of any dispute or difference relating to the interpretation and application of the provisions of commercial contract(s) between Central Public Sector Enterprises (CPSEs) / Port trust inter se and also between CPSE(s) and Govt. Department(s) / Organization (s) (excusing disputes concerning railways, income tax, Custom & Excise departments), such dispute or difference shall be taken up by either party for resolution through AMRCD as mentioned in DPE OM no. 4(1)/2013-DPE-(GM)/FTS-1835 dated 22.05.2018"
- 2.4 Notwithstanding the existence of any dispute or arbitration in terms hereof or otherwise, the Contractor/ seller shall continue and be bound to continue and perform the Works to completion in all respects according to the Contract (unless the Contract or Works be determined by EIL) and the Contractor/ seller shall remain liable and bound in all respects under the Contract.

TIME FOR COMPLETION

[ANNEXURE - I TO SPECIAL CONDITIONS OF CONTRACT]

DURATION OF CONTRACT/TIME FOR COMPLETION

NAME OF WORK	DURATION OF CONTRACT/TIME FOR COMPLETION
MISCELLANEOUS CIVIL AND STRUCTURAL WORKS FOR TRINITROTOLUENE (TNT) PLANT AT HIGH EXPLOSIVES FACTORY (HEF) KHADKI OF MUNITIONS INDIA LIMITED (MIL), PUNE, MAHARASHTRA (Bidding Document No. B889-000-81-46-CF-T-8202-0)	<u>Time for completion of work</u> 07 (Seven) Months from the date of issue of Letter of Acceptance.

Note:

1. The time for completion shall be reckoned from **effective date, as mentioned in Letter of Award of Work.**
2. The time indicated is for completing all the works in all respects as per scope of work, specifications, codes, drawings and instructions of Engineer-in-Charge.
3. It should be noted that the period of completion of all works given above includes time required for mobilization at site, carrying out the works as per the requirements Contract Document, demobilization, preparation of all reports in requisite quantities as mentioned in the Bidding document, rectifications, if any, rework etc. complete in all respects to the entire satisfaction of Engineer-in-Charge.
4. Fronts shall be released progressively as per site requirement.

(SIGNATURE OF BIDDER)

TERMS OF PAYMENT
[ANNEXURE - II TO SPECIAL CONDITIONS OF CONTRACT]

PAYMENT TERMS FOR CONTRACTS ON ITEM RATE BASIS**ON ACCOUNT PAYMENTS**

Progressive payments shall be released to Contractor against monthly running account bills duly certified by Engineer-in-charge after affecting the necessary deductions/recovery, if any. The basis for payment against various items shall be as follows:

S. NO.	NATURE OF WORK	PAYMENT TERMS
1.	<u>CIVIL</u>	
1.1	Soil Investigation/ Geotechnical/ Topographical & route survey	<ul style="list-style-type: none"> - 80% on completion of work on prorated basis as certified in monthly progress bill. - 15% on submission of Final Documentation / Reports in Code-1. - 05% on completion of all works in all respects and issuance of completion certificate.
1.2	Piling – Installation	<ul style="list-style-type: none"> - 95% on installation of individual Pile for full length. - 05% on completion of all works in all respects and issuance of completion certificate.
1.3	Piling - Testing	<ul style="list-style-type: none"> - 80% on field testing. - 15% on submission of test reports along with analysis and acceptance thereof. - 05% on completion of all works in all respects and issuance of completion certificate.
1.4	Sheet Piling	<p><u>Case-I</u></p> <p><u>Installation of sheet pile with subsequent removal (Incase removal of pile is not possible, Case-II is applicable for payment terms)</u></p> <ul style="list-style-type: none"> - 05% on submission & approval of design - 25% on Design and supply of material at site - 50% on installation of sheet piling - 15% for subsequent removal of sheet piles - 05% on completion of all works in all respects and issuance of completion certificate. <p><u>Case-II</u></p> <p><u>Installation of sheet pile without removal</u></p> <ul style="list-style-type: none"> - 05% on submission & approval of design - 25% on Design and supply of material at site - 60% on installation of sheet piling - 05% on removal of water beam - 05% on completion of all works in all respects and issuance of completion certificate.

1.5	<p>U/G PIPING Measurement in Running Meter</p>	<p>a. CARBON STEEL (PIPES/ PRE-COATED PIPES – FREE ISSUE)</p> <ul style="list-style-type: none"> - 20% on fabrication. - 30% on NDT, Pre-testing, tape coating. - 30% on laying in position, welding, NDT/Radiography etc. - 15% after flushing, hydro-testing and backfilling of trenches. - 05% on completion of all works in all respects and issuance of completion certificate. <p>b. CARBON STEEL (CEMENT LINED) (PIPES – FREE ISSUE)</p> <ul style="list-style-type: none"> - 20% on completion of Cement lining and receipt of lined pipe at site. - 15% on fabrication. - 25% on NDT, Pre-testing, tape coating. - 20% on laying in position, welding, NDT/Radiography etc. - 15% after flushing, hydro-testing and back filling of trenches. - 05% on completion of all works in all respects and issuance of completion certificate. <p>Note: Contractor shall submit the Bank Guarantee for an equivalent amount of Free Issue Material taken outside the Project premises for cement lining purpose with validity till receipt of materials at Project premises plus 03 Months claim period.</p> <p>c. CARBON STEEL (PIPES–SUPPLIED BY CONTRACTOR)</p> <ul style="list-style-type: none"> - 05% on issuance of sub-order and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period - 45% on receipt and acceptance of pipes at site. - 10% on fabrication. - 15 % on NDT, tape coating. - 10% on laying in position, welding, jointing, NDT/Radiography etc. - 10% after flushing, hydro-testing and back filling of trenches. - 05% on completion of all works in all respects and issuance of completion certificate. <p>d. CARBON STEEL (PRE-COATED PIPES – SUPPLIED BY CONTRACTOR).</p> <ul style="list-style-type: none"> - 05% on issuance of sub-order and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period - 55% on receipt and acceptance of pipes at site. - 10% on fabrication. - 05 % on NDT, tape coating. - 10% on laying in position, welding, jointing, NDT/Radiography etc. - 10% after flushing, hydro-testing and back filling of trenches. - 05% on completion of all works in all respects and issuance of completion certificate.
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		<p>e. CARBON STEEL (CEMENT LINED) (PIPES – SUPPLIED BY CONTRACTOR).</p> <ul style="list-style-type: none"> - 05% on issuance of sub-order (for bare line pipes or cemented line pipes) and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period - 55% (##) on receipt and acceptance of Cement lined pipe at site. - 10% on fabrication. - 10% on NDT, tape coating. - 10% on laying in position, welding, jointing, NDT/Radiography etc. - 05% after flushing, hydro-testing and backfilling of trenches. - 05% on completion of all works in all respects and issuance of completion certificate. <p>## Further break up of payment schedule, if necessary, shall be recommended/ approved by Engineer-in-charge.</p>
1.6	<p>U/G PIPING Measurement in In-Dia & In-Meter</p>	<p>CARBON STEEL (PIPES/ PRE-COATED PIPES – FREE ISSUE)- In case SOR items are in Inch-dia (fabrication) and Inch-meter (erection).</p> <p>Fabrication (ID)</p> <ul style="list-style-type: none"> - 65% on welding of joints. - 30% on radiography and other examinations, repair of welds, repeat radiography, extensions and penalty shots, if any, making the spools ready for erection. - 05% on completion of all works in all respects and issuance of completion certificate. <p>Erection (IM)</p> <ul style="list-style-type: none"> - 30% on pre-testing, tape coating of prefabricated pipes. - 45% on trenching, laying in position, field welding, jointing, NDT/radiography and ready for hydrotesting. - 20% on hydrotesting, drying (if applicable) and backfilling of trenches. - 05% on completion of all works in all respects and issuance of completion certificate.
1.7	<p>Specials / MITRES for U/G Piping</p>	<ul style="list-style-type: none"> - 85% after welding of joints & its acceptance. - 10% after completion of tests as per respective piping spec, wrapping/coating, painting (as applicable). - 05% on completion of all works in all respects and issuance of completion certificate.

2.	CIVIL, STRUCTURAL AND ARCHITECTURAL WORKS	
2.1	<u>Structural steel works</u>	<p>I. In case of Contractor supplied material.</p> <p>a. FABRICATION AT SITE</p> <ul style="list-style-type: none"> - 05% on finalization of quantities, plan and submission of approved fabrication drawings. - 05% on issuance of sub-order and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period. - 50 % on receipt and acceptance of material at site. - 20% on fabrication, surface preparation and application of primer coat. - 08% on erection. - 07% on alignment, bolting / welding, tightening, torquing, grouting etc. - 05% on completion of all works in all respects and issuance of completion certificate. <p>b. FABRICATION AT YARD OUTSIDE PROJECT PREMISES</p> <ul style="list-style-type: none"> - 05% on finalization of quantities, plan and submission of approved fabrication drawings. - 05% on issuance of sub-order and submission of equivalent rolling bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period. - 50% on receipt and acceptance of material at contractor fabrication yard outside the Project premises against Rolling Bank Guarantee for an equivalent amount of materials at contractor's shop with a validity till receipt of materials at Project premises plus 03 Months claim period. - 20% on fabrication, surface preparation and application of primer and receipt of fabricated structures at site. - 08% on erection. - 07% on alignment, bolting / welding, tightening, torquing, grouting etc. - 05% on completion of all works in all respects and issuance of completion certificate. <p>II. At issue rates (Chargeable basis).</p> <ul style="list-style-type: none"> - 05% on finalization of quantity, plan and submission of fabrication drawings. - 50% on transportation of material from storage yard / stores points to fabrication yard and fabrication surface preparation and application of primer coat. - 30% on erection. - 10% on alignment, bolting / welding, tightening, torquing, grouting etc. - 05% on completion of all works in all respects and issuance of completion certificate.

		<p>III. Free Issue.</p> <ul style="list-style-type: none"> - 05% on finalization of quantity, plan and submission of fabrication drawings. - 50% on transportation from storage yard / stores points to fabrication yard, fabrication, surface preparation and application of primer coat. - 30% on erection. - 10% on alignment, bolting / welding, tightening, torquing, grouting etc. - 05% on completion of all works in all respects and issuance of completion certificate.
2.2	Reinforcement steel	<ul style="list-style-type: none"> - 05% on issuance of sub-order and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period. - 65% on receipt and acceptance of material at site. - 25% on cutting, laying and acceptance thereof. - 05% on completion of all works in all respects and issuance of completion certificate.
2.3	Precast concrete Item/ Block (Contractor supplied material)	<ul style="list-style-type: none"> - 60% on completion of casting work duly certified by Engineer-in- charge. - 20% against erection. - 15% against alignment, leveling, grouting etc. - 05% on completion of all works in all respects and issuance of completion certificate.
2.4	Precast concrete Item/ Block (Cement Free issue material)	<ul style="list-style-type: none"> - 50% on completion of casting work duly certified by Engineer-in- charge. - 30% against erection. - 15% against alignment, leveling, grouting etc. - 05% on completion of all works in all respects and issuance of completion certificate.
2.5	Structural Steel Painting Works	<ul style="list-style-type: none"> - 95% (##) after completion of touch up/repair of primer and intermediate coat/coats and final coat. - 05% on completion of all works in all respects and issuance of completion certificate. <p>(##) Further break up of payment schedule, if necessary, shall be recommended/ approved by Engineer-in-charge depending on number of intermediate coats.</p>
2.6	Composite items.	<p>Composite items of Reinforced Cement Concrete (RCC) work inclusive of Excavation, shoring, strutting, Plane Cement Concrete (PCC), Centering and shuttering, back filling and disposal of surplus earth in sub-structure:</p> <ul style="list-style-type: none"> - 35% on completion of earth work in excavation, PCC centering & shuttering - 45% on completion of RCC - 15% on back filling and removal of surplus earth - 05% on completion of all works in all respects and issuance of completion certificate.

2.7	Composite items.	<p>Composite items of RCC work in non-suspended slabs/pavement slabs including pedestals, ramps etc.</p> <ul style="list-style-type: none"> - 40% on completion of sand filling, centering, shuttering and PCC - 55% on completion of RCC - 05% on completion of all works in all respects and issuance of completion certificate.
2.8	Composite items.	<p>Brick works in sub-structure</p> <ul style="list-style-type: none"> - 50% on completion of excavation and PCC and receipt of Bricks at site - 25% on completion of Brick works - 20% on completion of back filling and disposal of surplus earth - 05% on completion of all works in all respects and issuance of completion certificate
2.9	Architectural works.	<p>I. Steel/ Aluminium/ Glazed Glass/ PVC etc. Doors, Windows & Ventilators.</p> <ul style="list-style-type: none"> - 10% on issuance of sub-order and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period - 65% on receipt of material at site - 20% on Installation and acceptance - 05% on completion of all works in all respects and issuance of completion certificate. <p>II. Fire Door</p> <ul style="list-style-type: none"> - 10% on issuance of sub-order and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period - 05% on approval of Shop drawings. - 60% on receipt and acceptance of material including all accessories at site - 20% on Installation and acceptance - 05% on completion of all works in all respects and issuance of completion certificate. <p>III. Roofing</p> <ul style="list-style-type: none"> - 10% on issuance of sub-order and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period - 65% on receipt of material at site - 20% on Installation and acceptance - 05% on completion of all works in all respects and issuance of completion certificate.



Architectural works.

IV. False Ceiling, False flooring,

- 10% on issuance of sub-order and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period
- 60% on receipt of material at site
- 25% on Installation in position and acceptance
- 05% on completion of all works in all respects and issuance of completion certificate.

V. Fire Proof Partition/ Aluminum Partition/ Gypsum Partition/ Toughened Glass Partition

- 10% on issuance of sub-order and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period
- 60% on receipt and acceptance of material at site
- 25% on Installation in position and acceptance
- 05% on completion of all works in all respects and issuance of completion certificate.

VI. Cladding/ Facades etc.

- 05 % on submission & approval of design & drawings
- 10% on issuance of sub-order & submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period
- 60% on receipt and acceptance of material at site
- 20% on Fixing/ Installation and acceptance
- 05% on completion of all works in all respects and issuance of completion certificate

VII. Modular Furniture

- 10 % on approval of furniture drawings at least in Code II
- 60% on receipt of material at site
- 25% on Fixing/ Installation and acceptance
- 05% on completion of all works in all respects and issuance of completion certificate.

VIII. Internal & External Paint of Building.

- 10% on application of putty/ primer /surface preparation etc.
- 45 % (##) on Primer& intermediate coats.
- 40% on Final coat.
- 05% on completion of all works in all respects and issuance of completion certificate.

(##) Further break up of payment schedule, if necessary, shall be recommended/ approved by Engineer-in-charge.

	<p>Architectural works.</p>	<p>IX. Waterproofing cum Over Deck Roof Insulation Works.</p> <ul style="list-style-type: none"> - 10% on surface preparation and application of primer. - 50% on intermediate coats / layers. - 35% on Final layer, testing etc. - 05% on completion of all works in all respects and issuance of completion certificate <p>X. Composite items of Partition works made with Glass Partition & Gypsum Partition.</p> <ul style="list-style-type: none"> - 5% on approval of Shop Drawings - 35% on receipt and acceptance of material at site - 55% on Installation and acceptance. - 05% on completion of all works in all respects and issuance of completion certificate. <p>XI. Composite items of Acoustical Wall Paneling with fabric wrapped, Green Wall.</p> <ul style="list-style-type: none"> - 5% on approval of Shop Drawings - 35% on receipt and acceptance of material at site - 55% on Installation and acceptance - 05% on completion of all works in all respects and issuance of completion <p>The above payment terms will be applicable for similar items in miscellaneous items. the decision of engineer-in-charge on identification of similar items shall be binding on the contractor.</p>
<p>2.10</p>	<p>Platform, Ladder</p>	<p>I. In case of Contractor supplied material.</p> <p>a. FABRICATION AT SITE</p> <ul style="list-style-type: none"> - 50% on receipt and acceptance of material at site. - 30% on fabrication, surface preparation and application of primer. - 15% on erection, aligning and welding. - 05% on completion of all works in all respects and issuance of completion certificate. <p>b. FABRICATION AT YARD OUTSIDE PROJECT PREMISES / VENDOR'S SHOP</p> <ul style="list-style-type: none"> - 50% on receipt and acceptance of material at contractor fabrication yard outside the Project premises against Rolling Bank Guarantee for an equivalent amount of materials at contractor shop with validity till receipt of materials at Project premises plus 03 Months claim period. - 30% on fabrication, surface preparation and application of primer and receipt of fabricated material at site. - 15% on erection, alignment, welding etc. - 05% on completion of all works in all respects and issuance of completion certificate.

		<p>II. At issue rates (Chargeable basis)</p> <ul style="list-style-type: none"> - 80% on transportation of material from storage yard / stores points to fabrication yard, fabrication, surface preparation and application of primer coat. - 15% on erection, alignment, welding etc. - 05% on completion of all works in all respects and issuance of completion certificate. <p>III. Free Issue</p> <ul style="list-style-type: none"> - 65% on transportation from storage yard / stores points to fabrication yard, fabrication, surface preparation and application of primer coat. - 30% on erection, alignment, welding etc. 05% on completion of all works in all respects and issuance of completion certificate.
2.11	Hand Railing	<p>I. In case of Contractor supplied material.</p> <p>a. FABRICATION AT SITE</p> <ul style="list-style-type: none"> - 50% on receipt and acceptance of material at site. - 20% on fabrication, surface preparation and application of primer and galvanizing (if applicable) - 15% on erection, aligning and welding. - 10% after completion of completion of final painting. - 05% on completion of all works in all respects and issuance of completion certificate. <p>II. At issue rates (Chargeable basis)</p> <ul style="list-style-type: none"> - 70% on transportation of material from storage yard / stores points to fabrication yard, fabrication, surface preparation and application of primer coat ,galvanizing and painting (if applicable) - 15% on erection, alignment, welding etc. - 10% after completion of completion of final painting. - 05% on completion of all works in all respects and issuance of completion certificate. <p>III. Free Issue</p> <ul style="list-style-type: none"> - 65% on transportation from storage yard / stores points to fabrication yard, fabrication, surface preparation and application of primer coat galvanizing and painting (if applicable) - 15% on erection, alignment, welding etc. - 15% after completion of completion of final painting. - 05% on completion of all works in all respects and issuance of completion certificate.

	<p style="text-align: center;">Hand Railing</p>	<p>IV. Contractor supplied handrail (Handrail Fabricated outside refinery with raw material).</p> <ul style="list-style-type: none"> - 10% on issuance of sub-order and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period. - 40% on receipt and acceptance of raw material at contractor fabrication yard outside the Project premises against Rolling Bank Guarantee for an equivalent amount of materials at contractor's shop with a validity till receipt of materials at Project premises plus 03 Months claim period. - 30% on receipt and acceptance of finished handrail at site. - 15% on erection, aligning, welding and completion of final painting or touchup as applicable. - 05% on completion of all works in all respects and issuance of completion certificate. <p>V. Contractor supplied pre-fabricated handrail (Handrail in final condition ordered on sub-vendor).</p> <ul style="list-style-type: none"> - 10% on issuance of sub-order and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period. - 70 % on receipt and acceptance of finished handrail at site. - 15 % on erection, aligning, welding and completion of final painting or touchup as applicable. - 05% on completion of all works in all respects and issuance of completion certificate.
<p>2.12</p>	<p style="text-align: center;">Gratings</p>	<p>I. Contractor supplied gratings (Grating Fabricated outside refinery with raw material).</p> <ul style="list-style-type: none"> - 10% on issuance of sub-order and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period. - 40% on receipt and acceptance of raw material at contractor fabrication yard outside the Project premises against Rolling Bank Guarantee for an equivalent amount of materials at contractor's shop/ yard with validity till receipt of materials at Project premises plus 03 Months claim period. - 30% on receipt and acceptance of finished gratings at site. - 15% on erection, aligning, welding and completion of final painting or touchup as applicable. - 05% on completion of all works in all respects and issuance of completion certificate. <p>II. Contractor supplied gratings (Grating in final condition ordered on sub-vendor)</p> <ul style="list-style-type: none"> - 10% on issuance of sub-order and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period. - 70 %on receipt and acceptance of finished gratings at site.



		<ul style="list-style-type: none"> - 15 %on erection, aligning, welding and completion of final painting or touchup as applicable. - 05% on completion of all works in all respects and issuance of completion certificate.
2.13	Other Civil, Structural & Architectural works	<ul style="list-style-type: none"> - 95% (##) on completion of work as certified in monthly progress bill. - 05% on completion of all works in all respects and issuance of completion certificate. <p>(##) Further break up of payment schedule, if necessary, shall be recommended/ approved by Engineer-in-charge.</p>
3.	<u>MECHANICAL WORKS</u>	
3.1	Above Ground Piping Works (Pipes & Pipe Components, Valves, Orifice plates - Free issue)	<p>a. <u>Fabrication & Erection of Piping</u></p> <ul style="list-style-type: none"> - 45% after fabrication including NDT, as applicable. - 30% after site erection, field welding, radiographic and other examination. - 10% after providing supports, alignment, providing vents, drains. - 08% after flushing, testing, draining and drying. - 02% after mechanical completion. - 05% on completion of all works in all respects and issuance of completion certificate. <p>b. <u>Erection of Valves, Orifice Plates</u></p> <ul style="list-style-type: none"> - 85% after transportation and erection. - 08% after flushing and testing. - 02% after mechanical completion - 05% on completion of all works in all respects and issuance of completion certificate.
3.2	Piping Works- Fabrication at site. (Pipe & Pipe Components, Valves - Supplied by Contractor)	<p>a. <u>Fabrication & Erection of Piping</u></p> <ul style="list-style-type: none"> - 05% on issuance of sub-order and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim - 45% after receipt and acceptance of material at site. - 20% on fabrication including NDT, as applicable. - 15% after site erection, field welding, radiographic and other examination. - 05% after providing supports, alignment, providing vents, drains - 03% after flushing, testing, draining and drying. - 02% after mechanical completion - 05% on completion of all works in all respects and issuance of completion certificate. <p>b. <u>Erection of Valves</u></p> <ul style="list-style-type: none"> - 10% on issuance of sub-order and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period.

		<ul style="list-style-type: none"> - 60% after receipt and acceptance of material at site. - 15% after erection, welding, radiographic and other examination. - 08% after hydro-testing and final approval. - 02% after mechanical completion. - 05% on completion of all works in all respects and issuance of completion certificate.
3.3	Piping Works- Fabrication at yard outside the Project premises. (Pipe & Pipe Components, Valves – Supplied by Contractor)	a. Fabrication & Erection of Piping <ul style="list-style-type: none"> - 05% on issuance of sub-order and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period. - 45% after receipt and acceptance of material at contractor fabrication yard outside the Project premises against Rolling Bank Guarantee for an equivalent amount of materials at contractor's shop with a validity till receipt of materials at Project premises plus 03 Months claim period. - 20% on fabrication including NDT, as applicable, and receipt of fabricated Piping at site. - 15% after site erection, field welding, radiographic and other examination. - 05% after providing supports, alignment, providing vents, drains - 03% after flushing, testing, draining and drying. - 02% after mechanical completion - 05% on completion of all works in all respects and issuance of completion certificate.
3.4	Fabrication of respective piping items in Inch Dia. (Free issue materials)	<ul style="list-style-type: none"> - 85% after welding of joints & its acceptance. - 08% after completion of tests as per respective piping spec. - 02% after mechanical completion - 05% on completion of all works in all respects and issuance of completion certificate.
3.5	Erection of piping items to be paid in IM basis. (Fabricated in Inch. dia. as above)	<ul style="list-style-type: none"> - 70% after site erection, field welding, radiographic and other examination. - 15% after providing support, alignment, providing vents, drains etc. - 08% after flushing, testing, draining and drying. - 02% after mechanical completion. - 05% on completion of all works in all respects and issuance of completion certificate.
3.6	Specials/ MITRES for A/G piping	<ul style="list-style-type: none"> - 85% after welding of joints & its acceptance. - 08% after completion of tests as per respective piping spec, application of shop primer etc. - 02% after mechanical completion - 05% on completion of all works in all respects and issuance of completion certificate.
3.7	NDT (i.e Radiography, UT, MPT/ DPT etc.)	<ul style="list-style-type: none"> - 95% on submission of reports and acceptance thereof. - 05% on completion of all works in all respects and issuance of completion certificate.

	<p>Equipment</p>	<ul style="list-style-type: none"> - 05% on completion of all works in all respects and issuance of completion certificate. <p>c. Heat Exchangers</p> <ul style="list-style-type: none"> - 65% after transportation from stores / storage points to erection site and erection. - 20% after alignment and grouting. - 08% after completion of flushing, draining, drying. - 02% after mechanical completion - 05% on completion of all works in all respects and issuance of completion certificate. <p>d. Testing of Heat exchangers</p> <ul style="list-style-type: none"> - 70% after testing. - 23% after completion of flushing, draining, drying by compressed air. - 02% after mechanical completion - 05% after completion of all works in all respects and issuance of completion certificate. <p>e. Machinerics (Compressors, Pumps & Misc.)</p> <ul style="list-style-type: none"> - 45% after transportation from stores / storage points to erection site and placing in position. - 30% after initial alignment, leveling and grouting. - 18% after final alignment, shaft alignment after pipe hook-up, dowelling, initial fill of lubricants, mounting of accessories and completion of piping. - 02% after mechanical completion. <p>05% on completion of all works in all respects and issuance of completion certificate.</p> <p>f. EOT Crane (In case of Contractor supplied material).</p> <ul style="list-style-type: none"> - 05% on finalization of design, engineering and submission of approved drawings. - 50% on receipt and acceptance of material at site. - 30% on installation and completion of EOT crane including Structural, Mechanical, Electrical, instrumentation works. - 02% on receipt of spares at site. - 08 % on completion of testing& acceptance, commissioning. - 05% on completion of all works in all respects and issuance of completion certificate.
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3.11	HVAC, Clean Agent System (CAS), Cathodic Protection (CP), Electrical Heat Tracing System (EHTS) Lump Sum	HVAC, Clean Agent System (CAS), Cathodic Protection (CP), Electrical Heat Tracing System (EHTS) Lumpsum. <ul style="list-style-type: none"> - 05% on finalization of design, engineering and submission of approved drawings. - 50% (##) on receipt and acceptance of material at site. - 30% (##) on installation - 02% on receipt of spares at site. - 08% on completion of testing& acceptance, commissioning. - 05% on completion of all works in all respects and issuance of completion certificate. (##) Further billing break up, if necessary, shall be recommended/approved by Engineer-in-charge.
3.12	ELEVATOR PACKAGE	ELEVATOR PACKAGE <ul style="list-style-type: none"> - 5% on issuance of suborder and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus three months of claim period. - 45% on receipt and acceptance of material at site - 15% after erection in M/c room, alignment of all equipment inside shaft including car body. - 15% on completion of installation including doors and other Electrical and Instrumentation work - 15% after testing and acceptance including load test - 05% on completion of all works in all respect and issuance of completion certificate.
4.	ELECTRICAL WORK	
4.1	For Supply Items	<ul style="list-style-type: none"> - 10% on issuance of sub-order and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period - 5% on vendor drawing submission as per DCI and approval - 80% on receipt and acceptance of material at site. - 05% on completion of all works in all respects and issuance of completion certificate.
4.2	For Erection Items	<ul style="list-style-type: none"> - 80% on completion of erection / installation. - 15% on testing and acceptance. - 05% on completion of all works in all respects and issuance of completion certificate.
4.3	For Items involving both Supply & Erection	<ul style="list-style-type: none"> - 05% on issuance of sub-order and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period - 05% on vendor drawing submission & approval - 55% on receipt and acceptance of material at site. - 20% after erection /installation. - 10% after testing and acceptance.

		<ul style="list-style-type: none"> - 05% on completion of all works in all respects and issuance of completion certificate.
5.	INSTRUMENTATION	
5.1	For Supply Items	<ul style="list-style-type: none"> - 10% on issuance of sub-order and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period - 05 % on vendor drawing submission as per DCI and drawing approval - 80 %on receipt and acceptance of material at site - 05% on completion of all works in all respects and issuance of completion certificate.
5.2	For Erection/ Installation Items	<p>a. Items not requiring loop checking.</p> <ul style="list-style-type: none"> - 85% on completion of erection./ installation. - 10% on testing - 05% on completion of all works in all respects and issuance of completion certificate. <p>b. Items requiring loop checking.</p> <ul style="list-style-type: none"> - 80% on completion of erection/ installation. - 15% on testing and loop checking. - 05% on completion of all works in all respects and issuance of completion certificate.
5.3	For Items with supply and erection / installation	<p>a. Items not requiring loop checking</p> <ul style="list-style-type: none"> - 05% on issuance of sub-order and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period - 60% on receipt and acceptance of materials at site. - 30% on completion of erection / installation and testing. - 05% on completion of all works in all respects and issuance of completion certificate. <p>b. Items requiring loop checking</p> <ul style="list-style-type: none"> - 05% on issuance of sub-order and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period - 55% on receipt and acceptance of materials at site - 25% on completion of erection / installation. - 10% on testing and loop checking - 05% on completion of all works in all respects and issuance of completion certificate.
5.4	Ducts, Trays and Other Fabricated Materials	<ul style="list-style-type: none"> - 10% on issuance of sub-order and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period.

	(Supply in Contractor's scope)	<ul style="list-style-type: none"> - 55% after receipt and acceptance of fabricated materials (Ducts / Trays) at site. - 25% after erection. - 05% after welding and final painting, if any - 05% on completion of all works in all respects and issuance of completion certificate.
5.5	Calibrations Main Instruments	<ul style="list-style-type: none"> - 80% after calibration. - 15% after completion of recalibration during loop test, if any - 05% on completion of all works in all respects and issuance of completion certificate.
5.6 (a)	<p>Package works (Design, Supply, Installation, testing & Commissioning like CCTV, fire alarm, access control works) Lumpsum</p>	<p>a. Package works (Design, Supply, Installation, testing & Commissioning like CCTV, fire alarm, access control works) Lumpsum.</p> <ul style="list-style-type: none"> - 05% on finalization of design, engineering and submission of approved drawings. - 60% (##) on supply and acceptance of material at site. - 20% (##) on installation and completion of Civil, Structural, Instrumentation works. - 02% on receipt of spares at site. - 08 % on completion of Testing & Commissioning. - 05% on completion of all works in all respects and issuance of completion certificate. <p>(##) Further billing break up, if necessary, shall be recommended/ approved by Engineer-in-charge.</p>
(b)	<p>Package works (Design, Supply, Installation, testing & Commissioning like IT works, LAN system) Lumpsum</p>	<p>b. Package works (Design, Supply, Installation, testing & Commissioning like IT works, LAN system) Lumpsum.</p> <ul style="list-style-type: none"> - 05% on finalization of design, engineering and submission of approved drawings. - 65% (##) on supply and acceptance of all material at site. - 25% (##) on acceptance which includes installation, configuration, checking of technical and functional requirements. - 05% on completion of all works in all respects and issuance of completion certificate including migration (if applicable). <p>(##) Further billing breakup, if necessary, shall be recommended/ approved by Engineer-in-charge.</p>

<p>5.7 (a)</p>	<p>Package works (Supply, Installation, testing & Commissioning like CCTV works) Lumpsum</p>	<p>a. Package works (Supply, Installation, testing & Commissioning Like CCTV, fire alarm, access control works) Lumpsum.</p> <ul style="list-style-type: none"> - 60% (##) on receipt and acceptance of material at site. - 25% (##) on installation and completion of Civil, Structural, Mechanical, Electrical, instrumentation works. - 02% on receipt of spares at site. - 08% on completion of Testing & Commissioning. - 05% on completion of all works in all respects and issuance of completion certificate. <p>(##) Further billing breakup, if necessary, shall be recommended/ approved by Engineer-in-charge.</p>
<p>(b)</p>	<p>Package works (Supply, Installation, testing & Commissioning like IT works, LAN system) Lumpsum</p>	<p>b. Package works (Supply, Installation, testing & Commissioning Like IT works, LAN system) Lumpsum.</p> <ul style="list-style-type: none"> - 65% (##) on supply and acceptance of all materials at site. - 30% (##) on Acceptance which includes installation, configuration, checking of technical and functional requirements. - 05% on completion of all works in all respects and issuance of completion certificate including migration (if applicable). <p>(##) Further billing breakup, if necessary, shall be recommended/ approved by Engineer-in-charge.</p>
<p>6.</p>	<p>TANKAGES</p>	<p>a. Free issue material</p> <p>i. Design and plate work of floating roof for both, Open tank floating roof and Covered tank floating roof:</p> <ul style="list-style-type: none"> - 05% on design of floating roof and approval of drawings. - 20% after fabrication. - 25% after erection. - 35% after welding, NDT / radiography and acceptance thereof. - 10% after testing. - 05% on completion of all works in all respects and issuance of completion certificate. <p>ii. Plate work:</p> <ul style="list-style-type: none"> - 05% on approval of fabrication drawings. - 20% after fabrication. - 25% after erection. - 35% after welding, NDT / radiography and acceptance thereof. - 10% after hydro-testing, disposal of water after hydro testing and cleaning of tank.



- 05% on completion of all works in all respects and issuance of completion certificate.

b. Material supplied by Contractor

i Design and plate work of floating roof for both, Open tank floating roof and Covered tank floating roof

- 05% on design of floating roof and approval of drawings.
- 05% on issuance of sub-order and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period
- 35% on receipt and acceptance of material at site.
- 10% after fabrication.
- 15% after erection..
- 20% after welding, NDT / radiography and acceptance thereof.
- 05% after testing.
- 05% on completion of all works in all respects and issuance of completion certificate.

ii Plate work

- 05% on approval of fabrication drawings.
- 05% on issuance of sub-order and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period
- 35% on receipt and acceptance of material at site.
- 10% after fabrication.
- 15% after erection.
- 20% after welding, NDT / radiography and acceptance thereof.
- 05% after hydro-testing, disposal of water after hydro testing and cleaning of tank.
- 05% on completion of all works in all respects and issuance of completion certificate.

iii Floating roof seals

- 05% on design and approval of drawings.
- 45% on receipt and acceptance of material at site.
- 35% on installation.
- 10% on testing and acceptance.
- 05% on completion of all works in all respects and issuance of completion certificate.

iv Appurtenances, Mixers etc.

- 65% after receipt and acceptance of material at site.

- 20% after installation, providing reinforcement pads.
- 10% after testing and acceptance.
- 05% on completion of all works in all respects and issuance of completion certificate.

v. Calibration

- 95% on submission of duly approved calibration charts.
- 05% on completion of all works in all respects and issuance of completion certificate.

vi. Painting

- 30% on surface preparation and primer application.
- 65% (##) on completion of final painting.
- 05% on completion of all works in all respects and issuance of completion certificate.

(##) Further break up of payment schedule, if necessary, shall be recommended / approved by Engineer-in-charge depending on number of intermediate coats.

vii. Tanks pads (including anti-corrosive layers)

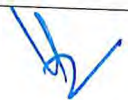
- 65% on construction of tank pad.
- 20% on completion of anti-corrosive layer.
- 10% on repair of anti-corrosive layers (if any)/pitching works and after testing of tanks
- 05% on completion of all works in all respects and issuance of completion certificate.

viii. Cooling Water System / Foam system

- 70% on supply and fabrication.
- 15% on erection, welding and NDT/Radiography including supports.
- 10% on Hydro testing.
- 05% on completion of all works in all respects and issuance of completion certificate.

ix. Insulation Works

- 10% on issuance of sub-order and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period
- 50% on supply and acceptance of material at site.
- 15% after installation of material.
- 20% on inspection after installation, its acceptance and removal of scaffolding, if any.
- 05% on completion of all works in all respects and issuance of completion certificate.



7.	<p>SPHERES (LUMPSUM BASIS)</p>	<p>a. Design & Engineering Cost</p> <ul style="list-style-type: none"> - 50% on submission of drawings and engineering details. - 30% on approval under Code 2. - 15% on approval under Code 1. - 05% on completion of all works in all respects and issuance of completion certificate. <p>b. Supply Cost (Spheres)</p> <p>Case-I: Shop Fabrication (Fabrication outside Project premises) & site Erection:</p> <ul style="list-style-type: none"> - 05% on issuance of sub-order for plates and submission of equivalent bank guarantee valid till completion period plus three months claim period. However, the bank guarantee shall be released after receipt and acceptance of fabricated items at site. - 40% against receipt of materials on prorata basis at contractor's works on certification by EIL/TPIA and submission of Bank Guarantee for equivalent amount valid till completion period plus three months claim period. However, the bank guarantee shall be released after receipt of fabricated items at site. - 30% on fabrication of structural steel/ pressing/forming of petals and crown etc on prorata basis against certification by EIL/TPIA and submission of Bank Guarantee for equivalent amount valid till completion period plus three months claim period. However, the bank guarantee shall be released after receipt of fabricated items at site. - 10% on receipt and acceptance of fabricated items at site on pro rata basis. - 10% on erection, alignment, welding, grouting, NDT on prorata basis - 05% on completion of all works in all respects and issuance of completion certificate. <p>Case-II: Shop Fabrication-Nil, Total Fabrication & Erection at site:</p> <ul style="list-style-type: none"> - 05% on issuance of sub-order for Plate material and submission of equivalent bank guarantee valid till completion period plus three months claim period. However, the bank guarantee shall be released after receipt and acceptance of material at site. - 50% on receipt and acceptance of material at site on prorata basis. - 30% on fabrication of structural steel/ pressing/forming of petals and crown etc on pro rata basis. - 10% on erection, alignment, welding, grouting, NDT on prorata basis. - 05% on completion of all works in all respects and issuance of completion certificate. <p>c. Site works cost (Site Erection):</p> <ul style="list-style-type: none"> - 80% on erection, alignment, welding/grouting, NDT on prorata basis.
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		<ul style="list-style-type: none"> - 15% on cleaning, testing etc. - 05% on completion of all works in all respects and issuance of completion certificate. <p>d. For all other items: Procurement & Supply</p> <ul style="list-style-type: none"> - 85% on receipt of materials at Site / fabrication yard within Project premises. - 10% on fabrication and erection/installation, alignment and grouting as required including testing where involved and required. - 05% on completion of all works in all respects and issuance of completion certificate. <p>Construction: Appropriate terms of payment for various items of works (civil, structural, mechanical, electrical, instrumentation etc.) shall be selected from the payment terms specified for item rate tenders.</p>
8.	<p>MOUNDED BULLETS (LUMPSUM BASIS)</p>	<p>a. Design & Engineering cost.</p> <ul style="list-style-type: none"> - 50% on submission of drawings and design details. - 30% on approval under Code 2. - 15% on approval under Code 1. - 05% on completion of all works in all respects and issuance of completion certificate. <p>b. Supply Cost (Mounded Bullets)</p> <p>Case-I: Shop Fabrication (Fabrication outside Project premises) & site Erection:</p> <ul style="list-style-type: none"> - 05% on issuance of sub-order for plates and submission of equivalent bank guarantee valid till completion period plus three months claim period. However, the bank guarantee shall be released after receipt and acceptance of fabricated items at site. - 40% against receipt of materials on pro-rata basis at contractor's works on certification by EIL/TPIA and submission of Bank Guarantee for equivalent amount valid till completion period plus three months claim period. However, the bank guarantee shall be released after receipt of fabricated items at site. - 30% on fabrication of shell / Dished Ends etc. on prorata basis against certification by EIL/TPIA and submission of Bank Guarantee for equivalent amount valid till completion period plus three months claim period. However, the bank guarantee shall be released after receipt of fabricated items at site. - 10% on receipt and acceptance of fabricated items at site on prorata basis. - 10% on erection, alignment, welding, grouting, NDT on prorata basis - 05% on completion of all works in all respects and issuance of completion certificate.

		<p>Case-II: Shop Fabrication-Nil, Total Fabrication & Erection at site:</p> <ul style="list-style-type: none"> - 05% on issuance of sub-order for Plate material and submission of equivalent bank guarantee valid till completion period plus three months claim period. However, the bank guarantee shall be released after receipt and acceptance of material at site. - 50% on receipt and acceptance of material at site on pro rata basis. - 30% on fabrication of shell / Dished Ends etc. on pro rata basis. - 10% on erection, alignment, welding, grouting, NDT on prorata basis. <p>05% on completion of all works in all respects and issuance of completion certificate.</p> <p>c. Site works cost (Site Erection):</p> <ul style="list-style-type: none"> - 80% on erection, alignment, welding, NDT on prorata basis. - 15% on cleaning, testing etc. - 05% on completion of all works in all respects and issuance of completion certificate. <p>d. For all other items: Procurement & Supply</p> <ul style="list-style-type: none"> - 85% on receipt of materials at Site / fabrication yard within Project premises. - 10% on fabrication and erection/ installation, alignment and grouting as required including testing where involved and required. - 05% on completion of all works in all respects and issuance of completion certificate. <p>Construction:</p> <p>Appropriate terms of payment for various items of works (civil, structural, mechanical, electrical, instrumentation etc.) shall be selected from the payment terms specified for item rate tenders.</p>
9.	<p>DWST (Double Wall Storage Tank) (LUMPSUM BASIS)</p>	<p>DWST (Double Wall Storage Tank) (LUMPSUM BASIS)</p> <p>a. Design & Engineering Cost</p> <ul style="list-style-type: none"> - 50% on submission of drawings and engineering details. - 30% on approval under Code 2. - 15% on approval under Code 1. - 05% on completion of all works in all respects and issuance of completion certificate. <p>b. Supply Cost (Double wall storage tank)</p> <p>Case-I: Shop Fabrication (Fabrication outside Project premises) & site Erection:</p> <ul style="list-style-type: none"> - 05% on issuance of sub-order for plates and submission of equivalent bank guarantee valid till completion period plus three months claim period.

However, the bank guarantee shall be released after receipt and acceptance of fabricated items at site.

- 40% against receipt of materials on prorate basis at contractor's works on certification by EIL/TPIA and submission of Bank Guarantee for equivalent amount valid till completion period plus three months claim period. However, the bank guarantee shall be released after receipt of fabricated items at site.
- 30% on fabrication of structural steel, shell, roof and bottom plate etc on prorate basis against certification by EIL/TPIA and submission of Bank Guarantee for equivalent amount valid till completion period plus three months claim period. However, the bank guarantee shall be released after receipt of fabricated items at site.
- 10% on receipt and acceptance of fabricated items at site on pro rata basis.
- 10% on erection, alignment, welding, grouting, NDT on prorate basis
- 05% on completion of all works in all respects and issuance of completion certificate.

Case-II: Shop Fabrication-Nil, Total Fabrication & Erection at site:

- 05% on issuance of sub-order for Plate material and submission of equivalent bank guarantee valid till completion period plus three months claim period. However, the bank guarantee shall be released after receipt and acceptance of material at site.
- 50% on receipt and acceptance of material at site on prorate basis.
- 30% on fabrication of structural steel, shell, roof and bottom plate etc. on pro rata basis.
- 10% on erection, alignment, welding, grouting, NDT on prorate basis.
- 05% on completion of all works in all respects and issuance of completion certificate.

c. Site works cost (Site Erection):

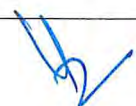
- 80% on erection, alignment, welding/grouting, NDT on prorate basis.
- 15% on cleaning, testing etc.
- 05% on completion of all works in all respects and issuance of completion certificate.

d. For all other items: Procurement & Supply

- 85% on receipt of materials at Site / fabrication yard within Project premises.
- 10% on fabrication and erection/ installation, alignment and grouting as required including testing where involved and required.
- 05% on completion of all works in all respects and issuance of completion certificate.

Construction:

Appropriate terms of payment for various items of works (civil, structural, mechanical, electrical, instrumentation etc.) shall be selected from the payment terms specified for item rate tenders.



9.	HEATERS	
9.1	Steel Works	<p>a. In case of Contractor's supplied materials:</p> <p>i. FABRICATION AT SITE</p> <ul style="list-style-type: none"> - 05% on finalization of quantities, plan and submission of approved fabrication drawings. - 05% on issuance of sub-order and submission of equivalent bank guarantee valid till completion period plus three months claim period. However, the bank guarantee shall be released after receipt and acceptance of material at site. - 35% on receipt and acceptance of material at site. - 20% on fabrication, surface preparation and application of primer coat. - 25% on erection, alignment, welding, grouting etc. - 05% on completion of Final painting. - 05% on completion of all works in all respects and issuance of completion certificate. <p>ii. FABRICATION AT YARD OUTSIDE PROJECT PREMISES</p> <ul style="list-style-type: none"> - 05% on finalization of quantities, plan and submission of approved fabrication drawings. - 05% on issuance of sub-order and submission of equivalent bank guarantee valid till completion period plus three months claim period. However, the bank guarantee shall be released after receipt and acceptance of fabricated items at site. - 35% on receipt and acceptance of material at contractor fabrication yard outside the Project premises against Rolling Bank Guarantee for an equivalent amount of materials at contractor's shop with a validity till receipt of materials at Project premises plus 03 Months claim period. - 20% on fabrication, surface preparation and application of primer and receipt of fabricated items at site. - 25% on erection, alignment, welding & grouting etc. - 05% on completion of Final painting. - 05% on completion of all works in all respects and issuance of completion certificate. <p>b. At issue rates (chargeable basis):</p> <ul style="list-style-type: none"> - 05% on finalization of quantity, plan and submission of fabrication drawings. - 70% on transportation of material to site, fabrication, surface preparation and application of shop primer. - 15% on erection, alignment, welding/grouting etc. - 05% on completion of Final painting.

		<ul style="list-style-type: none"> - 05% on completion of all works in all respects and issuance of completion certificate. <p>c. Free Issue:</p> <ul style="list-style-type: none"> - 05% on finalization of quantity, plan and submission of fabrication drawings. - 45% on transportation of material to site, fabrication, surface preparation and application of shop primer. - 35% on erection, alignment, welding/grouting etc. - 10% on completion of Final painting. - 05% on completion of all works in all respects and issuance of completion certificate.
9.2	Coils	<p>a. In case of Contractor supplied materials:</p> <ul style="list-style-type: none"> - 05% on issuance of sub-order and submission of equivalent bank guarantee valid till completion period plus three months claim period. However, the bank guarantee shall be released after receipt and acceptance of material at site. - 45% after receipt and acceptance of material at site. - 25% after fabrication, welding & NDT /radiography. - 05% after erection. - 10% after field welding is completed (including NDT/radiography and PWHT). - 05% after hydro-testing. - 05% on completion of all works in all respects and issuance of completion certificate. <p>b. i. In case of Owner supplied free issue material</p> <ul style="list-style-type: none"> - 60% after fabrication, welding, NDT / radiography. - 10% after erection. - 15% after field welding is completed (including NDT/radiography and PWHT) - 10% after hydro-testing. - 05% on completion of all works in all respects and issuance of completion certificate. <p>ii. Fabrication at Yard outside Project Premises.</p> <ul style="list-style-type: none"> - 05% on finalization of quantities, plan and submission of approved fabrication drawings. - 05% on issuance of sub-order and submission of equivalent bank guarantee valid till completion period plus three months claim period. However, the bank guarantee shall be released after receipt and acceptance of fabricated items at site. - 35% on receipt and acceptance of material at contractor fabrication yard outside the Project premises against Rolling Bank Guarantee for an equivalent amount of materials at contractor's shop with a validity till receipt of materials at Project premises plus 03 Months claim period.

		<ul style="list-style-type: none"> - 20% on fabrication, surface preparation and application of primer and receipt of fabricated items at site. - 20% on erection, alignment, welding & grouting etc. - 05% on completion of Final painting. - 05% after Hydrotesting. - 05% on completion of all works in all respects and issuance of completion certificate.
9.3	Burners	<p>a. In case of Contractor supplied material</p> <ul style="list-style-type: none"> - 05% on issuance of sub-order and submission of equivalent bank guarantee valid till completion period plus three months claim period. However, the bank guarantee shall be released after receipt and acceptance of material at site. - 65% after receipt and acceptance of material at site. - 25% after erection & alignment in position at site. - 05% on completion of all works in all respects and issuance of completion certificate. <p>b. In case of Owner supplied free issue material</p> <ul style="list-style-type: none"> - 95% after erection & alignment in position at site. - 05% on completion of all works in all respects and issuance of completion certificate.
9.4	Air pre-heaters	<p>a. In case of Owner supplied material as free issue</p> <ul style="list-style-type: none"> - 50% after erection. - 45% after alignment, testing etc. - 05% on completion of all works in all respects and issuance of completion certificate. <p>b. In case of Contractor supplied material</p> <ul style="list-style-type: none"> - 05% on issuance of sub-order and submission of equivalent bank guarantee valid till completion period plus three months claim period. However, the bank guarantee shall be released after receipt and acceptance of material at site. - 65 % after receipt and acceptance of material at site. - 15 % after erection. - 10% after alignment, testing etc. <p>05% on completion of all works in all respects and issuance of completion certificate.</p>
9.5	ID/FD Fans	<p>a. In case of Owner supplied material as free issue</p> <ul style="list-style-type: none"> - 45% after transportation from stores / storage points to erection site and placing in position. - 30% after initial alignment, leveling and grouting. - 20% after final alignment and mounting of accessories etc. - 05% on completion of all works in all respects and issuance of completion certificate.

		<p>b. In case of Contractor's supplied material</p> <ul style="list-style-type: none"> - 05% on issuance of sub-order and submission of equivalent bank guarantee valid till completion period plus three months claim period. However, the bank guarantee shall be released after receipt and acceptance of material at site. - 45% after receipt and acceptance of material at site. - 20% after transportation from stores / storage points to erection site and placing in position. - 15% after initial alignment, leveling and grouting. - 10% after final alignment and mounting of accessories etc. - 05% on completion of all works in all respects and issuance of completion certificate.
9.6	Insulation Works	<ul style="list-style-type: none"> - 10% on issuance of sub-order and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period - 50% on supply and acceptance of material at site. - 15% after installation of material. - 20% on inspection after installation, its acceptance and removal of scaffolding, if any. - 05% on completion of all works in all respects and issuance of completion certificate.
9.7	Refractory Works	<ul style="list-style-type: none"> - 10% on issuance of sub-order and submission of equivalent bank guarantee valid till completion period plus three months claim period. However, the bank guarantee shall be released after receipt and acceptance of material at site. - 40% on receipt and acceptance of materials at site. - 30% on installation. - 15% on initial dry out and acceptance. - 05% on completion of all works in all respects and issuance of completion certificate
9.8	Painting Works	<ul style="list-style-type: none"> - 30% on surface preparation and primer application. - 65% (##) on final painting. - 05% on completion of all works in all respects and issuance of completion certificate. <p>(##) Further break up of payment schedule, if necessary, shall be recommended/ approved by Engineer-in-charge depending on number of intermediate coats.</p>
9.9	Miscellaneous Works	<ul style="list-style-type: none"> - 95% (##) on completion of work on pro-rata basis as certified in monthly progress bill. - 05% on completion of all works in all respects and issuance of completion certificate. <p>(##) Further break up of payment schedule, if necessary, shall be recommended/ approved by Engineer-in-charge.</p>

10.	Laying of Pipeline and Associated Works (On Shore)	
10.1	Laying of Pipeline and Associated Works (On Shore)	<p>a. PIPELINE LAYING:</p> <p>Free issue:</p> <ul style="list-style-type: none"> - 5% on completion of site development, stacking, clearing and grading of ROU etc. - 10% on completion of trenching by excavation/ blasting. - 5% on completion of stringing. - 15% on completion of Fabrication, Alignment, Field Welding. - 5% on completion of Radiography, NDT. - 5% on completion of Joint Coating. - 10% on completion of Lowering, laying of HDPE duct - 05% on completion of Tie-ins - 10% on completion of Backfilling. - 10% on completion of hydrotesting - 05% on dewatering, swabbing, magnetic cleaning plus electronic geometry pigging. - 10% on completion of restoration and marker installation etc. - 05% on completion of all works in all respects and issuance of completion certificate. <p>The above payments shall be made subject to the following:</p> <ul style="list-style-type: none"> i. For the purpose of payments of 10% on account of lowering and laying of HDPE duct, 05% on account of tie- ins and 10% on account of back filling, a minimum continuous stretch of 10 KMs or 5% of spread length whichever is lower, will be considered except for discontinuities on account of listed crossings. ii (i) is not applicable in case of city areas and where continuous ROU stretch is not released. iii. For discontinuity on account of major crossings specified in SOR (being paid separately as SOR item) crossing length shall not be taken into account for (i) and (ii) above for payment purposes. iv. All crossings, i.e, Creek, Railway, Road, Horizontal Directional Drilling and River crossings which are not separately listed in SOR items shall be paid on the basis of linear pipeline length laid. <p>b. OPTICAL FIBRE CABLE / HDPE (Supply)</p> <ul style="list-style-type: none"> - 10% on issuance of sub-order against submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period. - 75 % on receipt and acceptance of material at Project site / yard. - 10 % on Testing after laying as per specification. - 05% on completion of all works in all respects and issuance of completion certificate.

c. Installation of OFC

- 55 % on completion of laying / blowing of OFC through HDPE duct laid in the same Pipeline Trench.
- 20 % on Supply & Erection of Jointing Pit, Jointing of OFC as per Specification.
- 20% on OFC Testing as per specification.
- 05% on completion of all works in all respects and issuance of completion certificate.

d. HDD WORKS

- 10 % on carrying out Geotechnical Survey and design Approval.
- 25% on string preparation, NDT clearance, pre testing and Joint coating.
- 10% on pilot hole drilling.
- 35 % on reaming and Pulling of string.
- 10% on Post testing, Tie in and backfilling.
- 05% on Restoration including bentonite disposal and obtaining NOC
- 05% on completion of all works in all respects and issuance of completion certificate.

e. MICROTUNELLING WORKS

Micro-tunneling and Pipeline installation along with associated works

- 05% on submission and approval of drawings
- 05% on all type of pre-construction survey required for Design & calculation.
- 15% on construction of launching and receiving shaft.
- 10% on Mobilization and placement of Micro-tunneling equipment along with all the accessories and consumables at site.
- 35% on Supply and Installation of Jacking Pipe at site location.
- 05% on Carrier Pipe pre-installation hydro testing / repair.
- 08 % on Installation of carrier pipeline & HDPE ducts, MMO wire anode carrying ducts for CP, including provision of supports inside jacking pipe.
- 07% on Blowing of OFC, gauging of pipeline, NDT, Post installation hydro-testing, dewatering and swabbing.
- 05% on capping of jacking pipe, backfilling, final Clean-up & restoration (complete in all respect), disposal of drilling fluid and waste etc. and acceptance of the system by Owner.
- 05% on completion of all works in all respects and issuance of completion certificate.

f. STATION WORKS (Receipt / Dispatch terminals):

Appropriate terms of payment for various items of works (civil, structural, mechanical, electrical, instrumentation etc.) shall be selected from the payment terms specified for item rate tenders.

		<p>g. TEMPORARY CATHODIC PROTECTION/ PERMANENT CATHODIC PROTECTION WORKS</p> <p>The payment for Temporary Cathodic Protection System shall be made based on the actual measurement of Pipeline in KM protected. The lump sum price for Temporary & Permanent Cathodic Protection system shall be considered and payable on prorate basis as per the following break-up</p> <ul style="list-style-type: none"> - 05% on approval of design Document. - 05% on issuance of sub-order against submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period. - 40% on receipt and acceptance of material at sites. - 20 % on installation of the system progressively. - 25 % on testing and commissioning of CP system. - 05% on completion of all works in all respects and issuance of completion certificate. <p>Note: Payment against testing and commissioning in case of Permanent Cathodic Protection shall include Post commissioning survey (DCVG/ CAT/ CIPL – as applicable) and interference mitigation.</p>
10.2	<p>SUBMARINE PIPE LINE LAYING WORK (FREE ISSUE MATERIAL)</p>	<p>Payment terms for pipeline laying are basic guidelines for payment of pipeline laying work. The payment terms need to be suitably modified, if required, depending on work and quantum of work in consultation with Project Manager and GM (C&P):</p> <p>a. Submarine Pipeline laying on pro-rata basis.</p> <ul style="list-style-type: none"> - 05% on completion of pre-construction survey. - 20% on mobilization of Lay-barge and other equipment. - 10% on Receiving, Taking over & Transportation of Coated Line Pipes to Installation site. - 50% on completion of repairs, welding, radiography, NDT, Installation including Trenching, Dredging and backfilling etc. - 05% on completion of hydro testing. - 05% on submission of As Built drawings & all other drawings/ documents. - 05% on completion of all works in all respects and issuance of completion certificate <p>b. Installation of SPM & PLEM System</p> <ul style="list-style-type: none"> - 05% on completion of pre-construction survey. - 20% on mobilization of Lay-barge and other equipments. - 10% on Receiving, Taking over SPM & PLEM etc. - 55% on completion of Installation and Testing. - 05% on submission of As Built drawings & all other drawings/ documents. - 05% on completion of all works in all respects and issuance of completion certificate <p>c. Pre-Commissioning & Commissioning Assistance.</p> <ul style="list-style-type: none"> - 50 % on Flood, Clean, Gauge & Hydro Test of Pipeline.

		<ul style="list-style-type: none"> - 30% on after completion of Pre-Commissioning, Integration and acceptance of the SPM system in all respects - 15% on completion of commissioning Assistance. - 05% on completion of all works in all respects and issuance of completion certificate.
10.3	COATING AND TRANSPORTATION OF COATED PIPES	<ul style="list-style-type: none"> - 10% after bare pipes are lifted by coating agency from pipe supplier yard. - 65 % prorata payment along with taxes & duties after coating and acceptance - 20% on receipt of coated pipes at dumpsite including repair charges and transportation charges for coated pipes. - 05% on completion of all works in all respects and issuance of completion certificate.
10.4	DUMPSITE DEVELOPMENT	<ul style="list-style-type: none"> - 10% on production of land lease agreement copy - 85% payment after development of dumpsite for receipt of pipes as per specifications. - 05% on completion of all works in all respects and issuance of completion certificate.
10.5	DUMPSITE MANAGEMENT	<ul style="list-style-type: none"> - 85% on completion of work on pro-rata basis as certified in monthly progress bill. - 10% on restoration and obtaining NOC from land owner. - 05% on completion of all works in all respects and issuance of completion certificate.
11.	MATERIAL HANDLING	<p>a. As soon as any consignment against a Bill of Lading /AWB is delivered at Project site in full, contractor shall submit his bills in triplicate as per Schedule of Price to Officer-in-Charge.</p> <p>b. If any of the consignments are required to be stored in contractor's godown by EIL / Owner, contractor may raise part bills for the services completed.</p> <p>Note: Further break-up of Lumpsum Prices, if deemed necessary for any progressive payment of individual item may be mutually arrived at between Engineer-in-Charge and the Contractor.</p>
12.	Miscellaneous Works	<ul style="list-style-type: none"> - 95% (##) on completion of work as certified in monthly progress bill. - 05% on completion of all works in all respects and issuance of completion certificate. <p>(##) Further break up of payment schedule, if necessary, shall be recommended/ approved by Engineer-in-charge.</p>
13.	For Lumpsum Rate Item (Not covered above)	<ul style="list-style-type: none"> - 95% on completion of total work in all respects. (For all lumpsum item included in Schedule of Rate, Contractor shall furnish price breakup for quoted lumpsum prices for the approval of Engineer-in-Charge. Progressive payment for such items shall be made accordingly. In this regard decision of Engineer-in- Charge shall be final and binding to the Contractor). - 05% on completion of all works in all respects and issuance of completion certificate.
14.		<p><u>PEB Buildings (Without Civil Foundation)</u></p> <ul style="list-style-type: none"> - 05% on approval of design, detailed engineering and preparation of drawings & documents and submission of equivalent bank guarantee valid till receipt

	PEB Buildings (Without Civil Foundation)	<p>and acceptance of material at site plus 3 months claim period.</p> <ul style="list-style-type: none"> - 65% (##) on receipt and acceptance of pre-fabricated & pre-engineered structures / members with application of primer & painting at project premises. - 25% (##) on erection, alignment, welding, bolting, grouting etc. - 05% on completion of works in all respect and issuance of completion certificate. <p>(##) Further billing break up if necessary, shall be recommended/ approved by Engineer-in-charge.</p>
15.	PEB Buildings (With Civil Foundation)	<p><u>PEB Buildings (With Civil Foundation).</u></p> <ul style="list-style-type: none"> - 05% on approval of design, detailed engineering and preparation of drawings & documents and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 3 months claim period. - 45% (##) on receipt and acceptance of pre-fabricated & pre-engineered structures / members with application of primer & painting at project premises. - 45% (##) on Civil Works erection, alignment, welding, bolting, grouting etc. - 05% on completion of works in all respect and issuance of completion certificate. <p>(##) Further billing breakup if necessary, shall be recommended/ approved by Engineer-in-charge.</p>
16.	Marine Cum Erection All Risk Insurance:	<p>Marine Cum Erection All Risk Insurance:</p> <p>Progressive payments shall be released to contractor against running account bills duly certified by Engineer in-charge after affecting the necessary deductions/ recovery, if any . The basis for payment against various items shall be as follows:</p> <p>a. Premium for Marine Insurance :</p> <p>100% upfront premium of premium against Marine insurance coverage after award of work and within a week of receiving the Proforma Premium invoice.</p> <p>The contractor shall submit the tax invoice and proof of payment of GST at the earliest but not later than 3 months of realization of payment.</p> <p>b. Premium against Erection All Risk (EAR) Cover :</p> <ul style="list-style-type: none"> • Premiums are to be released in installment on quarterly basis. • First premium shall be 5 % of the total Premium plus (95% of total premium /No of installments) within a week of receiving of invoice • Subsequent premium shall be of 95% of total Premium /No of installments and payable within due date of payment as specified in the policy. • The last premium shall be released at least six months before expiry of the policy. <p>No of Installment= $[1+\{\text{Period in months}-6\} /3]$</p> <p>The contractor shall submit the tax invoice and proof of payment of GST at the earliest but not later than 3 months of realization of payment.</p>

17.	Third Party Inspection services :	Third Party Inspection services: Progressive payments shall be released to contractor against running account bills duly certified by Engineer in-charge after affecting the necessary deductions/recovery, if any a. Third Party Inspection services for inspection of equipment and materials including package items (Wherein flat percentage rate have been specified): <ul style="list-style-type: none"> • Inspection services for the PO item: 90% shall be paid along with IRN of the respective PO item in complete status on prorata basis • 10% shall be paid along with issue of completeness certificate for final documentation as per VDR and on receipt and acceptance of all materials at site. b. Third Party Inspection services for inspection of equipment and materials including package items based on man-day rate: <ul style="list-style-type: none"> • 90% against submission of monthly bills and time sheet certified by the engineer in-charge • 10% shall be paid along with issue of completeness certificate for final documentation as per VDR and on receipt and acceptance of all materials at site. c. For other services like attending monthly review meetings based on Man day rate 100% against submission of monthly bills and time sheet certified by the engineer in-charge.
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NOTE:

1. The above payment terms commensurate with the work executed.
2. The above progress payments are subject to deductions towards income tax and other deductions as applicable as per terms of the Contract.
3. Withholding Tax at the prevailing rate shall be deducted as per the Indian Income Tax Act. TDS certificate shall be issued by the Owner.
4. Completion certificate is the certificate issued after attending the defects prior to taking over as specified in the General Conditions of Contract. In case separate nomenclature is provided for Completion certificate in GCC for various clients, the same shall be replaced by that certificate accordingly.
5. Part completion certificate whenever essential (in case of job in multi units, offloading case etc.) shall be issued with due concurrence from competent authorities to facilitate release of Final payment.



6. Where ever milestone payment is linked with sub ordering, Engineer-in-charge shall ensure that the total quantity against which the payment is released towards supply shall not exceed the final installed quantity of the item.
7. Wherever milestone payment has been recommended on receipt and acceptance of material, the same shall be released against "Incoming Material Inspection Report" issued by EIL. Engineer-in-Charge shall release the progressive payment towards supply in such a way ensuring that the total quantity against which the payment is released towards supply shall not exceed the final installed quantity of the item.
8. Mobilization Advance shall be paid as per the agreement with Owner for EPCM Projects and as per approval of EIL competent authority for OBE/LSTK.
9. Secured Advance shall be paid as per the agreement with Owner. However, no secured advance shall be paid against the material wherever milestone payment has been recommended on receipt and acceptance of material at site.



PAYMENT TERMS FOR VARIOUS CATEGORIES OF WORKS UNDER PACKAGES

1 ON ACCOUNT PAYMENTS

These payment terms shall be utilized only for the purpose of making progressive payments to the contractor. Progress Payments shall be released to Contractor against monthly running account bills duly certified by Engineer-in-charge after affecting the necessary deductions/recovery if any including interest charges accrued thereon. The basis for payment against various items shall be below:

2 TERMS OF PAYMENT

The basis and terms of payment for various items of Schedule of Lump sum prices, without prejudice to any other mode of recovery available to OWNER, shall be as follows: -

The CONTRACTOR shall submit further breakup for various activities of WORK for the purpose of billing for each discipline such as civil and structural, Mechanical, Piping, Electrical, Instrumentation, Insulation, Painting etc including breakup for Basic Design, Engineering, Detailed Engineering & procurement/supply which will be reviewed and approved by Engineer-in-charge within 60 days of submission of complete document in this regard by CONTRACTOR. The CONTRACTOR shall be paid monthly running account bills at stages of completion of individual item/work, based on the value assessment by Engineer-in-charge in the following manner after deductions of necessary dues payable by CONTRACTOR to the OWNER in accordance with various provisions made elsewhere in this document.

Sr. No.	Category of Work	PAYMENT TERMS
1	Design & Engineering.	<p>a) <u>Package without modeling scope</u></p> <ul style="list-style-type: none"> - 40% on submission of drawings and P&IDs (as applicable) and their approval under Code 2. - 20% on submission of critical drawings* and documents (to be identified in VDR) which are crucial for interface / downstream engineering under Code 1. - 25% for balance docs in Code-1 - 10% on submission of As-built drawings, Operating & Instruction manual (as applicable). - 05% on completion of all works in all respects and issuance of completion certificate. <p>(*) Critical drawings to be identified in the beginning (for all disciplines).</p> <p>b) <u>Package having modeling scope</u></p> <ul style="list-style-type: none"> - 30% on submission of drawings and P&IDs (as applicable) and their approval under Code 2. - 15% on submission of critical drawings* and documents (to be identified in VDR) which are crucial for interface / downstream engineering under Code 1. - 20% for balance docs in Code-1 - 10% on intermediate model review - 10% on final model review - 10% on submission of As-built drawings, Operating & Instruction manual (as applicable).

		- 05% on completion of all works in all respects and issuance of completion certificate. (* Critical drawings to be identified in the beginning (for all disciplines).
2	Procurement & Supply	- 10% on issuance of sub-order and submission of equivalent bank guarantee valid till completion period plus three months claim period. However, the bank guarantee shall be released after receipt and acceptance material at site. - 75% on receipt of materials at Site / fabrication yard within Project premises. - 10% on fabrication and erection/installation, alignment and grouting as required including testing where involved and required. - 05% on completion of all works in all respects and issuance of completion certificate.
3	Construction	Appropriate terms of payment for various items of works (civil, structural, mechanical, electrical, instrumentation etc.) shall be selected by C&P from the payment terms specified for item rate tenders and incorporate suitably in the tender document. Alternatively, Engineer-in-charge in discussion with Contractor can agree milestone payment for site grading, micro grading and building works items.
4	Trial Run & Commissioning	- 95% on commissioning & acceptance of plant/unit and submission of all documents. - 05% on completion of all works in all respects and issuance of completion certificate.

NOTES:

1. The above progressive payments are subject to deductions towards income tax and other deductions as applicable as per terms of the Contract. Tax at the prevailing rate shall be deducted as per the Indian Income Tax Act. Tax Deduction Certificate shall be issued by the Owner.
2. Completion certificate is the certificate issued after attending the defects prior to taking over as specified in the General Conditions of Contract. In case separate nomenclature is provided for Completion certificate in GCC for various clients, the same shall be replaced by that certificate accordingly.
3. Part completion certificate whenever essential (offloading case etc.) shall be issued with due concurrence from competent authorities to facilitate release of Final payment.
4. Wherever milestone payment has been recommended on receipt and acceptance of material, the same shall be released against "Incoming Material Inspection Report" issued by EIL.
5. Mobilization Advance shall be paid as per the agreement with Owner for EPCM Projects and as per approval of EIL competent authority for OBE/LSTK.
6. Secured Advance shall be paid as per the agreement with Owner. However, no secured advance shall be paid against the material wherever milestone payment has been recommended on receipt and acceptance of material at site.

ATTACHMENT - A to PAYMENT TERMS

ITEMS QUALIFYING FOR SECURED ADVANCE

1. CATEGORY: 'A' :: ITEMS AGAINST WHICH SECURED ADVANCE CAN BE GRANTED

AI : CIVIL

- (i) Bricks
- (ii) Stone and Brick Aggregate
- (iii) Stones
- (iv) Finished products of brass, iron or steel such as doors and window frames, wiremesh, gate, G.I Sheets
- (v) Precast R.C.C. product such as pipes & fittings, jali, water storage tanks
- (vi) Doors and windows fittings
- (vii) Pipes and sanitary fittings of G.I., C.I., S.C.I and HCL
- (viii) Metallic doors/windows
- (ix) M.S. Gratings
- (x) Reinforcement bars
- (xi) Hydraulic door closures
- (xii) Structural steel
- (xiii) C.I. Flushing cisterns
- (xiv) C.I. Valves, sluice gates etc.
- (xv) Fencing materials-Chainlink/Barbedwire etc.
- (xvi) Anchor bolts and Nuts

A.2 Electrical

- i) Steel Conduit
- ii) G.I. Pipes
- iii) C.I. Boxes
- iv) I.C. Boards
- v) Switchgears (Air circuit breakers and Air breaker switches)
- vi) A.C.S.R. Conductors.
- vii) A.C. Plant and Machinery
- viii) Pumps
- ix) Generating sets (without oil)
- x) G.I. Strips
- xi) Street light poles (Steel)
- xii) Cable Trays

A.3 Mechanical

- i) Structural Steel
- ii) Plates
- iii) Pumps/motors, vessels etc, Diesel engine, side entry mixers, suction heater & any other mechanical equipment.
- iv) Refractory bricks
- v) S.S. Foil
- vi) Pipes/Pipe fittings
- vii) Gratings

- viii) Valves, Hydrants, Monitors
- ix) Aluminum sheet

A.4 Instrumentation

- i) Structural steel
- ii) M.S. Sheet/G.I. Sheets
- iii) Prefabricated trays
- iv) Pipes/Tubes/fittings.

2. CATEGORY : 'B': ITEMS AGAINST WHICH SECURED ADVANCE CAN BE MADE AFTER OBTAINING INSURANCE COVER FROM THE CONTRACTOR

B-1 Civil

- i) Kitchen sink china vitreous, flush back for wash basin vitreous china, water closet and pedestal type water closet vitreous china, urinals.
- ii) Glazed tiles, terrazo tiles and similar articles.
- iii) Marble/Kota Stone/Granite slabs
- iv) Asbestos cement products
- v) Finished timber products such as doors, windows, flush doors, particle boards (subject to the mandatory tests being satisfactory).
- vi) Bitumen in sealed drums.
- vii) Bitumen felt
- viii) Polythene pipes and fittings.
- ix) Sanitary fittings and pipes of S.W. Porcelain and chinaware materials.
- x) Laminated/safety one way vision and Bullet proof glasses.
- xi) Chemicals required for antitermite treatment (in sealed drums).
- xii) Paints, Varnishes, Distempers, pigment.
- xiii) Ceiling and false flooring frames and tiles etc.
- xiv) Acid proof tiles
- xv) Bitumen products required for mastic flooring etc.
- xvi) Waterproofing, compounds such as CICO etc.
- xvii) Materials for Grouting, Epoxy finishing etc.
- xviii) PVC Water storage Tanks, PVC tiles, PVC waterbar etc.
- xix) Cement

B.2 Electrical

- i) Transformers
- ii) Switchgears (Oil filled)
- iii) L.T. &.H.T. Cables
- iv) Fans
- v) Storage & Dry Batteries
- vi) Insulation tapes
- vii) Epoxy cable compounds
- viii) Electric light fittings
- ix) Wood battens, casing & capping and wooden boards
- x) Flexible wires
- xi) PVC materials
- xii) Rubber materials
- xiii) Glass wools, thermocol and other insulating materials.
- xiv) Porcelain H.T. and L.T. insulators

- xv) Electric heat tracing tapes
- xvi) Oil and Lubricants.

B.3 Mechanical

- i) Bitumen.
- ii) Wrapping & Coating material
- iii) Primer/Paints
- iv) Foam/Foam seal material
- v) Guniting material
- vi) Insulation & Refractory materials other than bricks
- vii) Electrodes

B.4 Instrumentation

- i) SS/Copper Tubes
- ii) SS/Brass Compression fittings
- iii) Control/Signal Cables
- iv) Junction boxes/Marshalling boxes
- v) Control Panels.

NOTE: The Category "B" shall cover all the above items and any other item not covered in category "A" and "C" and imperishable in nature.

3. CATEGORY : 'C' -- ITEMS AGAINST WHICH NO SECURED ADVANCE SHOULD BE GRANTED

C-1 CIVIL

- i) Glass products other than those indicated in Category 'B'.
- ii) Sand and Mooram.
- iii) Chemical compounds other than those under Category 'B'.

C-2 ELECTRICAL

- i) Glass Globes and Shades.
- ii) Bulbs and Tubes.
- iii) Petrol and Diesel.
- iv) Freon and other refrigeration gases.

MODE OF MEASUREMENTS
[ANNEXURE - III TO SPECIAL CONDITIONS OF
CONTRACT]

1. GENERAL

The mode of measurement shall be as per the details mentioned in this Annexure.

- 1.1 In case of discrepancy between measurement of work specified in this Annexure, Standard Specification/ Job Specification, Schedule of Price/Rates etc., precedence shall be given in following order :
- 1.2 Measurement of works as per this Annexure of SCC.
- 1.3 Measurement of works as mentioned in Standard Specification/Job Specification.
- 1.4 Measurement of works in accordance with item description of relevant item mentioned in Schedule of Rates.
- 1.5 In case the clarity is not in the above documents, then it shall be as per BIS and if it does not exist in BIS also, then Measurement of works shall be as decided by Engineer-in-Charge.
- 1.6 Payment will be made on the basis of joint measurements taken by Sub-contractor and certified by Engineer-in-Charge. Measurement shall be based on "Approved for Construction" drawings, to the extent that the work conforms to the drawings and details are adequate.
- 1.7 Wherever work is executed based on instructions of Engineer-in-Charge or details are not adequate in the drawings, Sub-contractor shall take physical measurements in the presence of Engineer-in-Charge.
- 1.8 Measurements will be made on the basis of following units indicated in unit column of schedule of rates.

Weights	MT or Kg
Length	M (Metre)/ CM (Centimetre)/ MM (Millimetre)
Number	No.
Volume	Cu.M
Area	Sq.M

- 1.9 Welds, bolts, nuts, washers etc. shall not be measured. No payment for temporary works connected with this Contract or for items such as weld, shims, packing plates etc. shall be made by Owner. Cost of above items shall be included in the unit rates quoted.
- 1.10 Wherever the unit of items has been indicated as lumpsum, the payment shall be made on lumpsum basis on completion & no mode of measurement shall be applicable.

2. GENERAL CIVIL, STRUCTURAL AND ARCHITECTURAL WORKS

The measurement of works as mentioned in the relevant Technical/Standard Specification shall be followed.

3. PIPING AND RELATED WORK**3.1 PIPING**

- a) Payment will be made based on linear measurement as per execution drawings.
- b) All lines shall be measured along the centre lines of pipes, curvilinear centre lines of bends and elbows, centre line of flanges and all other fittings such as tees, reducers, expansion joints etc. all in line instruments, line mounted fittings, ejectors, eductors, mixers, sight glasses, trays, inline filters, desuperheaters etc. Length of all types of valves (except socket weld and screwed valves upto 1.5" size) shall be excluded in this measurement. However, no separate payment for socket weld valves upto 1-1/2" size shall be made and the quoted rates for piping shall be deemed to include the same.
- c) The socket weld fittings shall be supplied to the sub-contractor as per the requirements of the drawings. All other hot/cold bends, reducers etc. for size 1-1/2" and below shall be fabricated and erected as per requirements by the sub-contractor at no additional cost and his rates for piping of size 1-1/2" and below shall be inclusive of this work.
- d) The forged tees shall be supplied to the sub-contractor as per the requirement of the drawings. All other branch connections including reinforcement pads shall be accomplished by pipe to pipe connections. The rates quoted for piping shall be inclusive of making branch connections. The reinforcement pads shall be measured separately.
- e) Vents and drains shall be measured from O.D. of pipe lines and shall be paid for at the corresponding unit rates for similar sizes of pipe. Other piping attachment such as couplings, earthing lugs etc. shall be supplied & erected by the sub-contractor within his quoted rates for piping. However, vents and drains required temporarily for flushing and testing shall be provided by the sub-contractor at their cost.
- f) Fabrication of spool pieces for temporary use to aid Sub-contractor's work such as fabrication, erection, flushing and testing of piping etc. shall be done by Sub-contractor at his cost as part of piping work and no separate payment shall be made for the same.
- g) In case of branch piping, the measurement shall be made from outer surface of the main line except in case of equal size branches, in which case measurement shall be made from centre line of the branching header.
- h) As regards safety valves, size of valves will be identified by inlet pipe size.
- i) Reducers will be paid alongwith piping of larger dia- meter except in the case of funnels where they are welded only to the smaller diameter pipe, for which payment will be made alongwith piping of such smaller dia.
- j) All piping attachments such as couplings, orifice plates, steam traps, strainers, earthing lugs etc. shall be provided by the Sub-contractor as part of piping erection work and no separate payment will be made for the same.

3.2 Piping Works

Measurement of above ground and underground piping shall be done in the following manner:

3.2.1 Fabrication of Piping

Measurement for fabrication of pipe shall be done on the basis of Inch. dia (the nominal diameter of pipe in 'Inches' multiplied by number of weld joints). All pre-fabrication work (including transportation of materials to site, fit up, shop weld, fabrication of spool pieces for erection) as well as all piping welding in situ are covered in Inch. dia. of fabrication. This shall include all types of SW/BUTT-welding e.g. GTAW, SMAW.

Payment shall be made based on the unit rate against following diameter range of pipes and type of welds, under the headings of pipe metallurgy (CS/AS/SS etc., separately for IBR/NIBR and thickness upto 10 MM/10-20 MM/20-30 MM/30-40MM etc.).

Butt Welds

Upto 1-1/2" NB
2" to 6" NB
8" to 14" NB
16" to 24" NB
26" to 36" NB
38" to 48" NB
50" to 60" NB
Above 60" NB

Fillet Welds

Upto 1-1/2" NB
2" to 6" NB
8" to 14" NB
16" to 24" NB
26" to 36" NB
38" to 48" NB
50" to 60" NB
Above 60" NB



Total welding for slip on flanges shall be accounted as one single joint per flange. Seal welds, wherever required shall not be counted under weld joints.

No separate payment shall be made for welding involved in pipe supports.

Branch welds shall be considered under butt welds

3.2.2 Erection of Piping

Measurement will be done based on Inch. Meter (the nominal diameter of pipe in 'Inches' multiplied by the installed length of piping in 'Meters') as per execution drawing. Inch. Meter shall include all work pertaining to Erection of Fabricated spools/straight lengths, providing vent, drains, instrument tapings, alignment, hydro-testing and all other activities required as per item description, but not covered in scope under Inch. dia.

Payment shall be made based on the unit rate against following diameter range of pipes:

Upto 1-1/2" NB
2" to 6" NB
8" to 14" NB

16" to 24" NB
26" to 36" NB
38" to 48" NB
50" to 60" NB
Above 60" NB

All lines shall be measured along the centre lines of pipes, curvilinear centre lines of bends and elbows, centre line of flanges and all other fittings such as tees, reducers, expansion joints etc. all in line instruments, line mounted fittings, ejectors, eductors, mixers, sight glasses, trays, filters, desuperheaters etc. Length of all types of valves except socket weld valves upto 1-1/2" shall be excluded in this measurement. However, no separate payment for socket weld valves upto 1-1/2" size shall be made and the quoted rates for piping shall be deemed to include the same.

3.2.3 REMARKS:

Measurement of following flanged/ screwed items shall be in linear Running meter basis/Lumpsum basis, as applicable:

- i) Clad steel piping
- ii) Cement lined piping
- iii) Rubber lined piping
- iv) Teflon lined piping
- v) Plastic piping (HDPE etc.)
- vi) Galvanised piping
- vii) Jacketed piping
- viii) Steam Tracers
- ix) Tubing

Measurement of following items shall be on number basis:

- Piping Specials like Mitres & Fabricated Reducers
- Reinforcement pads

3.3 Fabrication of Specials

For fabrication of mitre bends and reducers (concentric & eccentric) from the pipes/ Steel plates/ fabricated pipes to be supplied by Owner free of cost, payment will be made on numbers of such specials at the rates given separately in Schedule of Rates. The unit rate shall be inclusive of tests such as DP/ MP as mentioned in item description of an item. However, the erection of mitre bends and reducers shall be part of piping erection work and the rates for piping will be inclusive of this work.

3.4 Valves

All types of valves such as gate/ globe / check / plug / needle/ ball/ control/ safety valves/ Gate Valves/ Butterfly valves etc. will be measured and paid on number basis at the rates given in the Schedule of Rates. Dismantling and re-erection of the valves required for the purpose of testing, calibration etc. shall not be considered for measurement as same are to be carried out by the sub-contractor within his quoted rates. The length of such valves along with companion flanges shall be excluded from piping length.

3.5 Fabrication of Supports

Measurement and payment of fabrication of pipe supports shall be on weight basis.

Bolts, nuts and washers including U-bolt will be supplied by sub-contractor. Weight of bolts, nuts and U-bolts etc. shall not be added to the weight of pipe support for payment purpose. Spring supports, if any, shall be supplied by Owner as Free Issue.

Erection of all types of supports, including grouting of supports, if required, shall be carried out by the Sub-contractor as part of piping work and no separate measurement & payment will be made for it. However, for erection of pre-issued support assemblies like spring, strut, snubber etc., payment shall be done separately.

3.6 Post Weld Heat Treatment (Stress Relieving)

Measurement and payment for post weld heat treatment shall be on the basis of per circumferential joint for different diameters of pipes as per the rates quoted. Repeat post weld heat treatment for repaired joints or otherwise due to Sub-contractor's fault will be carried out at Sub-contractor's cost. In case of attachment welding (of support to piping) undergoing PWHT, the weld length shall be considered for payment on the basis of equivalent circumferential weld joint.

3.7 Radiography/ Dye-Penetrant (DP) Test / Magnetic Particle (MP) Test

Measurement and payment for radiography shall be made on the basis of circumferential joints for different pipe diameter. Repeat radiography due to defective films or on repaired joint due to Sub-contractor's fault or for additional radiography necessitated due to poor performance of Sub-contractor's welder will be done at Sub-contractor's cost.

Measurement and payment for magnetic particle and dye penetrate test will be on the basis of weld length tested/ circumferential weld joints as mentioned in schedule of rates.

The cost of DP/MP test included in item description of piping items such as Fabrication of Specials, Reinforcement Pads etc. shall be included in the quoted unit rate and no additional payment for such DP/MP test for such items shall be made. Payment for DP/MP test shall be made only for such items where DP/MP test is not included in item description.

The cost for performing Positive Materials Identification (PMI) using alloy analysers including hiring of such equipment and mobilisation of the same to site shall be included in the unit rate for all such items of piping where PMI is specified in the item description.

4. PAINTING ON EQUIPMENTS/ PIPING/ STRUCTURAL STEEL ETC.

4.1 Painting on Equipments

For columns, vessels, reactors, Exchangers, furnaces, ejectors etc., measurement shall be on square meter basis taken over the painted surface.

For equipment numbering, name, lettering and stencilling (only for Pressure Vessels) separate payment for letter shall be made as per the rates mentioned in Schedule of Rates.

For pumps, motors and compressors measurement shall be made on number basis.

4.2 Painting on Piping, Specials and Fittings

Payment will be made on linear measurement in 'Meters' corrected to the nearest centimetre.

Piping shall be measured along the centre line through all types of fittings and flanges.

Rates for painting of pipes shall be inclusive of painting of all types of pipe supports, flanges, guides, shoes, saddles, clamps, etc. and also all types of fittings except valves which shall be paid separately on number basis.

There will be no separate measurements of the colour bands/ identification signs (line numbering), flow direction etc. on uninsulated and insulated piping, the rates of painting of linear length of piping shall be inclusive of cost of such works.

4.3 Painting on Steel Structure

Payment for steel structures shall be made on the basis of admissible weight of structure painted.

Welds, bolts, nuts, washers etc. shall not be measured and paid as rates for painting of structure are inclusive of painting of such items.

5. THERMAL INSULATION WORKS

The mode of measurement shall be as per the details mentioned in this Annexure.

In case of discrepancy between measurement of work, specified in this Annexure. Standard Specification/Job Specification, Schedule of Price/Rates etc., precedence shall be given in following order :

- Measurement of works as per this Annexure of SCC.
- Measurement of works as mentioned in Standard Specifications/Job Specification.
- Measurement of works in accordance with item description of relevant item mentioned in Schedule of Rates.

In case the clarity is not in the above documents, then it shall be as per BIS and if it does not exist in BIS also, then Measurement of works shall be as decided by Engineer-in-Charge.

Payment will be made on the basis of joint measurements taken by Contractor and certified by Engineer-in-Charge. Measurement shall be based on "Approved for Construction" drawings, to the extent that the work conforms to the drawings and details are adequate.

Wherever work is executed based on instructions of Engineers-in-Charge or details are not adequate in the drawings, Contractor shall take physical measurements in the presence of Engineer-in-Charge.

Welds, bolts, nuts, washers etc, shall not be measured. No payment for temporary works connected with this Contract or for items such as weld, shims, packing plates etc, shall be made by OWNER. Cost of above items shall be included in the unit rates quoted.

Wherever the unit of items has been indicated as lumpsum, the payment shall be made on lumpsum basis on completion & no mode of measurement shall be applicable.

Piping

Measurement of piping shall be taken/considered along Curvilinear centre lines of pipe insulated and through all fittings which are insulated but excluding valves, instruments and fittings which are insulated measurements shall be considered as under :

- a) For all types of valves, including control valves on which removable box has been provided: payment shall be made per number. This shall be including mating flanges on both side and proper body of valves/control valves.
- b) For all type of flange assembly including orifice plate, payment shall be made on number basis.
- c) For bends, additional measurement equivalent to single length of curvilinear centre lines of bends shall be added to the respective size of piping.
- d) Reducers will be considered with larger diameter.
- e) No extra payment shall be made for tees, branch connections and inspection plugs and the rates quoted shall be inclusive of all these items. Branch connections shall be measured from the outer surface of the header.
- f) No extra payment shall be made for vents, drains and instrument connections having nozzles length upto 12". However, if the length of such connections exceeds 300mm the same will be paid as per piping measurement in respective sizes.
- g) For all fittings measurement along curvature centre line shall be considered.
- h) Steam/Refrigerant traced lines and untraced pipelines shall be normally specified and measure separately Steam/Refrigerant traced lines shall also be normally specified and measured separately, according to the number of tracers.
- i) For steam/Refrigerant traced pipelines, which are specified and are measured separately, only the diameter of the main pipelines (s) shall be reckoned for measurement of insulation. No. separate measurement shall be made for the insulation of the steam tracer line(s) which shall be deemed to have been covered under the insulation of the main pipeline.
- j) For all fittings measurement along curvature centre line shall be considered.

NOTE :

All other mode of measurement not covered in above clauses shall be measured in accordance with relevant BIS codes/Schedule of Rates/Specifications etc. and/or as decided by Engineers-in-Charge. The above measurement of works shall not be applicable for lumpsum items of SOR.

TAXES & DUTIES

[ANNEXURE -> TO SPECIAL CONDITIONS OF CONTRACT]

Section- I

A. Price basis w.r.t inclusion/exclusion of taxes and duties

1. The quoted price(s) shall be inclusive of all the taxes and duties except GST (i.e. IGST or CGST and SGST/UTGST applicable in case of interstate supply or intra state supply respectively) and GST compensation cess, (if applicable) leviable on sale of finished goods/services.
2. In case of foreign bidders, bidders shall submit their prices on FOB international sea port of exit basis/CFR on destination port basis *Note-1 (INCOTERM XXXX *Note-2), unless otherwise stated in the bid document. FOB/CFR *Note-1 prices quoted shall be inclusive of all applicable taxes up to FOB international sea port of exit/CFR on destination port basis *Note-1.
3. Transportation charges (if applicable) up to respective project site shall be exclusive of GST.
4. Site work prices, if applicable shall be inclusive of all taxes and duties except GST. All necessary registrations, if required, for carrying out the site activities shall be done by the bidder and costs towards the same shall be included in quoted site work prices.
5. Prices of per diem supervision charges, training/AMC, HAZOP Study etc. (as applicable) shall be exclusive of GST. However, GST shall not be applicable on training provided at foreign bidder's work/training facilities in any territory other than India.

B. TAX CLAUSES

1. Goods and Services Tax

- a. The supplier/contractor will be liable to register with the respective tax authorities and to submit self-attested copy of such registration certificates and the supplier/contractor will be responsible for procurement of goods/services in its own registration (GSTN).
- b. Supplier/Contractor shall be required to issue tax invoice in the form and manner prescribed under GST Act read with Rules thereunder including E-Invoicing provisions so that input tax credit under GST can be availed by EIL. In the event that the supplier/contractor fails to provide the Tax Invoice/E-Invoice in the form and manner prescribed under the GST act read with GST invoicing rules thereunder, EIL shall not be liable to make any payment on account of GST against such invoice.

- c. In case supplier/contractor is not subject to E-Invoicing provisions under the GST Laws as amended from time to time, then a declaration to this effect shall be furnished by the supplier/contractor in format prescribed along with the Invoice.
- d. GST shall be paid to supplier/contractor against receipt of Tax Invoice/E-Invoice and on auto-population of input tax credit on GSTN portal. In case of non-receipt of Tax Invoice/E-Invoice and/or non-auto-population of input tax credit on GSTN portal, EIL shall with hold the payment of GST.
- e. The supplier/contractor shall always comply with the requirements of applicable laws and provide necessary documents as prescribed under the rules and regulations, as applicable from time to time. In particular, if any tax credit, refund or any other benefit is denied/delayed to EIL or any interest/penalty is charged to EIL due to any non-compliance/ delayed compliance by the supplier/contractor under the GST Law (including but not limited to failure to upload the details of the sale on GSTN portal, failure to pay GST to the government or due to non-furnishing or furnishing of incorrect or incomplete documents, non-filing of GST return by the supplier/contractor), the supplier/contractor shall be liable to reimburse EIL for all such losses and other consequences including but not limited to the tax loss, interest and penalty. EIL shall be entitled to recover such amount from the supplier/contractor by way of adjustment from the next invoice, encashment of BG or by way of any other means either of same project or any other project of the EIL.
- f. In case of any Advance including Mobilization/Secured/Other Advance is granted to supplier/contractor as per the provisions of Contract, then the supplier/contractor shall issue a Receipt Voucher / GST Invoice in the form and manner prescribed under GST Act read with Rules thereunder including e-invoicing provisions.
- g. In case of any Price Variation as per the provisions of Contract, the supplier/contractor shall issue an Invoice in the form and manner prescribed under the GST Act read with Rules thereunder including e-invoicing provisions.
- h. GST payable under reverse charge for specified services/goods under GST Act read with Rules thereunder, if any, shall not be paid to the supplier/contractor but will be directly deposited by EIL to the appropriate Government Tax Authority. If the same has already been reimbursed / paid to the supplier/contractor for any reason whatsoever, then EIL shall be entitled to deduct/set off /recover such amount against any amounts paid/payable by EIL to supplier/contractor.

- i. Where EIL has the obligation to discharge GST liability under reverse charge mechanism and EIL has paid or is liable to pay GST to the government on which interest/penalty becomes payable as per GST law for any reason which is not attributable to EIL or Input Tax Credit w.r.t. such payment is not available to EIL for any reason which is not attributable to EIL, then EIL shall be entitled to deduct/set off /recover such amount against any amounts paid/payable by EIL to contractor/supplier.
- j. TDS under GST, if applicable shall be deducted from supplier/contractor bills at applicable rates and a certificate as per rules for tax so deducted shall be provided to supplier/contractor.
- k. The supplier/contractor will be under obligation for charging correct rate of tax as prescribed under the respective tax laws. Further the supplier/contractor shall avail and pass on benefits of all exemptions/concessions available under applicable tax laws.
- l. In case bidder is covered under composition scheme under GST law, then bidder shall quote the price inclusive of GST. Further, such bidder should mention "Covered under GST Composition Scheme" in column for GST of relevant price schedule(s). In case subsequently such bidder gets covered under regular GST regime, the prices including GST under regular GST regime shall not exceed the prices quoted by the bidder under composition scheme.
- m. EIL prefers to deal with registered supplier/contractor of goods/services under GST. Therefore, bidders are requested to get themselves registered under GST, if not registered yet. However, in case any unregistered bidder is submitting bid, their prices will be loaded with applicable GST while evaluation of bid as per evaluation methodology of tender document. However, where EIL is entitled for input credit of GST, the same will be considered for evaluation of bid as per evaluation methodology of tender document.
- n. In case of foreign bidders, for supervision/site-work/training, services provided by foreign bidder at project site, GST shall be paid by EIL directly to appropriate Government Tax Authorities, under Reverse Charge Mechanism, if applicable and prices of such services will be loaded with applicable GST while evaluation of bid as per clause E (Evaluation Methodology).
- o. Bidder will be required to quote applicable tax rate (along with applicable HSN/SAC Code) as per provisions of GST Laws for all the line items forming part of the enquiry. Any higher rate of tax actually invoiced in excess of

quoted rate of tax (except in compliance with provisions of Statutory Variation clauses) shall be adjusted in basic price.

- p. In case of delay in supply/execution of contract, supplier/contractor shall be liable to raise invoices for reduced value as per Price Reduction Schedule (PRS) provision of the bidding document. In case the supplier/contractor raises invoices for full value, then supplier/contractor shall issue Credit Note, in the form and manner prescribed under relevant GST Act read with Rules thereunder, towards applicable PRS amount with applicable GST thereon.

In case supplier/contractor fails to submit invoices with reduced value or does not issue Credit Note as mentioned above, EIL shall release payment to the supplier/contractor after giving effect to the PRS clause with corresponding reduction in taxes from invoice(s) of supplier/contractor.

In case any financial implication arises on EIL due to issuance of invoice without reduction in prices or non-issuance of Credit Note by supplier/contractor, the same shall be to the account of supplier/contractor. EIL shall be entitled to recover the amount of such financial implication paid or becoming payable by EIL together with penalty and interest thereon, if any.

- q. E-way bills shall be issued directly by supplier/contractor in all cases except in cases of direct imports by EIL where E-way bill shall be issued by EIL.
- r. In case of applicability of any recovery as per provisions of the contract, EIL shall raise invoice on supplier/contractor after charging GST at applicable rates as per prevailing provisions of GST Laws.

2. IMPORT DUTIES

- a. Direct supplies by foreign supplier, where EIL becomes consignee
- i. Consignee shall be EIL, bill of entry shall be filed by EIL, all import duties, Social Welfare Surcharge, IGST and GST Compensation Cess etc. as applicable in India shall be paid by EIL .
- b. Imported supplies by Indian suppliers as built in import content where Suppliers/Contractors will become consignee of the goods by filling Bill of Entry for Home consumption
- i. Custom duties, Social Welfare Surcharge, IGST, GST Compensation Cess, etc. as applicable in India on the imported materials shall be included in the quoted prices by the bidder (considering the input tax credit of IGST, GST Compensation Cess on imported material) and supplier/contractor shall be responsible for the timely payment of the

custom duties to the relevant government authority. All harbor dues/ pilotage fees, port fees, wharfage, unloading costs, demurrage charges etc. incurred in India in respect of any imported goods shall be to supplier's/contractor's account.

- ii. Bidder to indicate, in relevant price schedule, CIF value of built-in import content and applicable merit rate of custom duty, Social Welfare Surcharge on custom duty (considering the input tax credit of IGST, GST Compensation Cess on imported material) included in quoted price, in the price schedule.
- iii. In case merit rate of custom duty is applicable and bids are invited on the basis of same, however at a later stage concessional rate of custom duty becomes applicable, concessional certificate shall be issued towards import of material against the advance request letter submitted by the domestic bidder and the differential custom duties between concessional rate and quoted merit rate of custom duty by supplier/contractor shall be passed on to the EIL or it shall be recovered by the EIL from the supplier/contractor's invoice.
- iv. The supplier/contractor shall be responsible for and shall exercise due diligence in properly classifying the goods and materials, undertaking the payment of custom duties, and/or otherwise complying with all applicable laws w.r.t. import of the goods and materials.
- v. If bidder does not furnish built in CIF value and rates of custom duty, in that case bidder shall not be entitled to claim any variation in the custom duties even if bidder has quoted their prices considering custom duties.
- vi. If custom duty rate actually paid on import of materials and components is found to be lower than the quoted rate of custom duty, then benefit of the same shall be passed on to the EIL.
- vii. If bidder has considered Import Duty other than Merit Rate of Import Duty, then statutory variation on the Import Duty shall be payable extra on the Merit Rate of Import Duty or the rate of Import Duty considered by the bidder, whichever is lower.
- viii. In case, no import is made for execution of the order, clauses related to Imports will not be applicable.

c. General points:

- i. In case EIL is exposed to any penal action, interest /penalties by the custom authorities for incorrect declaration and / or valuation of the goods or material by the supplier/contractor, or otherwise on account of any breach of applicable laws in the course of the import of the goods and material by supplier/contractor, the supplier/contractor shall indemnify and hold harmless EIL for any and all costs, expenses or losses suffered or incurred by EIL in this regard



- ii. If bidder intends to source import of goods from a country with which India has Free Trade Agreement (FTA) or Comprehensive Economic Partnership Agreement (CEPA) or any such multi-lateral / bi-lateral Agreement or Treaty with India or under Generalized System of Preference (GSP); or under any other notification (allowing lower rate of custom duty), then the bidder is advised to ascertain and confirm its applicability along with supporting documents in the bid and ensure that conditions of such agreement/treaty etc. are strictly complied with.
- iii. The bidder shall be liable to provide all documentation to ensure avaiiment of the exemption/waiver. In case the bidder defaults on this due to any reason, whatsoever, he shall be liable to bear the incremental custom duty applicable if any
- iv. Any additional custom duty applicability on account of any change in the notification (allowing lower rate of custom duty)/ CEPA/FTA/multi-lateral/bi-lateral trade agreement shall be to bidder's account.
- v. Documentation to be furnished for availing the exemption/waiver of custom duty shall be specifically listed in the letter of credit also as a prerequisite for release of payment against shipping documents and this documentation shall necessarily form a part of shipping documents.
- vi. EIL will not bear any liability towards payment of Safeguard Duty, Anti-Dumping Duty, Protective Duty and applicable IGST including GST Cess on same or Countervailing Duty on subsidized articles or any other such duties of Customs imposed by Government under Customs Tariff Act, 1975.
- vii. In case custom duty rate as quoted by foreign bidder is less than Actual rate applicable on due date of submission of last price bid and payment of custom duty is on EIL's Account, differential amount on account of above-mentioned rate variation will be recovered from foreign bidder.

3. INCOME TAX

a. Foreign supervisors/suppliers/contractors

Prices of site work, contracts and other services of foreign supplier/contractor shall be gross of income tax i.e., inclusive of Indian



income tax at the applicable prevailing rate as per Indian Income Tax Act and Rules there under.

EIL shall deduct withholding tax at source (TDS) as applicable while making payments against each invoice. Certificate for TDS shall be provided to the supplier/contractor.

In case foreign bidder quotes Prices of site work, contracts and other services "net of Income Tax" i.e., exclusive of Indian income tax, EIL shall deduct and deposit TDS as applicable after grossing up the sums due while making payments against each invoice at the applicable prevailing rate as per Indian Income Tax Act and Rules thereunder.

Foreign bidder shall furnish the information required in line with the prevalent provisions of Income tax act read with rules thereunder including but not limited to Tax residency certificate, Form 10F, No permanent establishment declaration, No business connection certificate, PAN in India if available.

Failing to provide above documents/information, tax will be withheld at rates applicable as per the provisions of Income Tax Act, 1961 read with rules thereunder and the benefit of reduced rates will not be given.

If the non-resident is unable to obtain & submit Tax Residency Certificate to the EIL within a reasonable time, the bidder should furnish Form 10F along with an undertaking to the effect that the bidder is a tax resident of (the specified country) and that they shall obtain and provide the tax residency certificate (TRC) to the EIL before 30 days of submission of first Invoice by them or within 3 months from the date of entering into contract whichever is earlier.

In case of contracts with term exceeding one financial year, the relevant documents like TRC, Form 10 F, No PE / Business Connection Certificate etc. as applicable, as per Income Tax Act, 1961 must be submitted at the beginning of each financial year and the EIL will not bear additional tax liability (if any) arising from non-submission of documents.

The bidder shall be liable to intimate the subsequent changes (if any) to the information submitted against any of the above particulars, along with full details.

In addition to the above particulars, the bidder should also provide any other information as may be required at a later stage for determining the taxability of the amount to be remitted to the non-residents.



In case, any additional tax liability arises on the EIL due to any action of bidder like delay in submission / non-submission of information / documents required as above or change in residential status post submission of documents or change in any document (like TRC, Form 10F etc.) after its submission shall be recovered from the supplier/contractor.

b. Indian resident supervisors/ suppliers/contractors

Prices for supply and services of Indian suppliers/ contractors shall be inclusive of income tax.

Tax shall be deducted at source (TDS) by EIL on all sums due to supplier/contractor in accordance with the provisions of Indian Income Tax act read with rules thereunder as in force at the relevant point of time.

EIL shall issue a Tax Deduction Certificate to the supplier/contractor evidencing the tax deducted or withheld and deposited by EIL on payments made to the supplier/contractor to enable the supplier/contractor to claim the credit of Tax deducted by EIL.

c. INCOME TAX (General Points):-

- i. The supplier/contractor shall also be responsible for ensuring compliance with all applicable provisions of the Direct Tax Laws of India including, but not limited to, the filing of relevant Tax Returns and shall promptly provide all information required by the EIL for discharging any of its responsibilities/liabilities under such laws in relation to or arising out of the Contract. For the lapses/failure, if any, on the part of the supplier/contractor and consequential penal action taken by the Income Tax department, EIL shall not take any responsibility whether financial or otherwise and shall be indemnified by the supplier/contractor.
- ii. The Indian Income Tax Act and Rules made thereunder contains provisions permitting deduction of tax at source (TDS) at lesser rate if the supplier/contractor is able to justify to the Income Tax Authorities such lesser rate of deduction. However, a deduction once made has to be deposited by the EIL with the Income Tax Authorities in India and will not be adjustable by the EIL. It is therefore in the interest of the supplier/contractor that prior to release of any payment due to the supplier/contractor under the Contract that the supplier/contractor obtains from the relevant Income Tax Authorities in India, a certificate specifying the rate of deduction/withholding of



Income tax at source, failing which, payment to the supplier/contractor shall be made by the EIL after withholding/deduction at the rate as may be applicable to the supplier/contractor as per provisions of Income Tax Act, 1961.

- iii. TDS on interest recovered on Mobilization/Other Advance will be deposited by the supplier/contractor and same would be reimbursed by the EIL against submission of Form-16A (TDS certificate).

C. INVOICING METHODOLOGY W.R.T. TAXATION

Following invoicing methodology shall be followed :

1. In case of domestic / foreign PO's (Other than 2 below) , Invoice/E-Invoice shall be raised by the supplier/contractor in the name of EIL and consignee shall be EIL.
2. In case of package MR's (where title transfer or take over is envisaged to take place at site after completion of site work) and tenders, supplier/contractor shall bring material at project site in their own name and they themselves shall be consignee. As per provisions of contract between EIL and supplier/contractor, Invoice/E-Invoice shall be raised by supplier/contractor to EIL after charging GST.

D. APPLICABILITY OF TAX CREDIT

Input credit is available to EIL as per GST law.

E. EVALUATION METHODOLOGY W.R.T. TAXES

Following shall be loaded for evaluation:

1. Applicable Custom Duty, Social Welfare Surcharge etc, (excluding IGST & GST Compensation Cess (if applicable) on imported material which shall be dealt as per bid evaluation methodology given in E2 below) shall be loaded for price bid evaluation in respect of supplies for which bill of entry has to be filled by EIL.
2. GST on which input credit is not available to EIL including GST Compensation Cess (if applicable).
3. Applicable Income tax, in case foreign bidder quotes prices net of taxes.

F. TAXATION TERMS FOR INDIAN SOURCED SUPPLIES (Applicable in case of foreign supplier)

Shall be the same as applicable for Indian bidders.

G. TAX IMPLICATION WHERE FABRICATION YARD IS OUTSIDE THE FACTORY PREMISES, WHEREVER APPLICABLE



In case of package MRs and tenders, since contractors/suppliers shall bring material at project site in their own name and raise invoice to EIL (as per payment milestone achieved) after charging GST, location of fabrication yard whether inside or outside factory premises will not attract any additional liability.

H. TAX IMPLICATION WHERE EIL WILL ISSUE FREE ISSUE MATERIAL (FIM) TO CONTRACTORS/SUPPLIERS

Where EIL issues FIM's to suppliers/contractors, material will be released against delivery challan and such FIM shall be received back in factory premises as per provision of GST.

I. STATUTORY VARIATION (IN CASE OF MRS & TENDERS)

No variation on account of taxes and duties, statutory or otherwise, shall be payable to Supplier/Contractor except for the following:

1. GST: If after the due date of submission of last price bid and up to the contractual delivery/completion period (*Note 4), any increase/decrease occurs in the applicable rate of GST, the variation in such GST shall be to EIL's account and shall be adjusted (increase / decrease) to / from the Supplier's/Contractor's invoices based on the documentary evidence.

Any increase in GST after the contractual delivery/completion period (*Note 4) shall be to Supplier's/Contractor's account. However, any decrease in the rate of GST shall be passed on to EIL.

For calculating Statutory Variations ceiling amount as declared by the Bidder in price schedule shall only be considered.

2. Basic Custom Duty (BCD) & Social Welfare Surcharge (SWS): If after the due date of submission of last price bid and upto the XX (*Note-3) of contractual delivery/completion period (*Note 4), any increase/decrease occurs in the applicable rate of BCD & SWS on materials imported, the variation in such BCD & SWS shall be to EIL's account and shall be adjusted (increase/decrease) to/from the Supplier's/Contractor's invoices based on the documentary evidence.

Any increase in rate of BCD & SWS on materials imported after the XX (*Note-3) of the contractual delivery/completion period (*Note 4) shall be to Supplier's/Contractor's account. However, any decrease in the rate of BCS & SWS on materials imported shall be passed on to EIL.

For calculating Statutory Variations in BCD/SWS, ceiling amount of CIF Value and rate of custom duty as declared by the Bidder in relevant price schedule shall only be considered.



Note: Indian supplier/contractor to consider input tax credit of IGST and GST Compensation Cess if any (in case of import of raw Materials / components) in their quoted prices. Hence, Statutory variations on same in case of imported materials from outside India in Supplier's/Contractor's name (i.e., for Indian Bidders) shall be to Supplier/Contractor account.

3. Any new output taxes, duties, cess, levies notified or imposed after the due date of submission of last price bid but upto the contractual date of delivery/completion (*Note 4) shall be to EIL's account. These shall be reimbursed against documentary evidence. However, in case of delay attributable to supplier/contractor, any new output taxes, duties, cess, levies notified or imposed after Time for Completion, defined as above, shall be to supplier's/Contractor's account.

J. TAX INDEMNITY

Any omission/ errors of interpretation of applicability of taxes, duties, cesses and levies, whatsoever named, howsoever named, as are payable to any government, local or statutory authority in India or in any country other than India by the supplier/contractor shall be to supplier's/contractor's account.

If any fine/penalty/any other levy is required to be met by the EIL arising out of any non-compliance/fault/fraud/willful suppression/misstatement of facts/information/documents, whatsoever, of any applicable laws of India or any country other than India by the supplier/contractor/their personnel/sub-contractors/agencies, the same shall be recovered from any amount payable to the supplier/contractor under this contract or under any other contract of the EIL.

If any tax is paid / required to be paid by supplier/contractor in pursuance of any demand of any law enforcement agency/Tax Authority on account of non-compliance/fault/fraud/willful suppression/misstatement of facts/information/documents, whatsoever, of any applicable laws of India or any country other than India by the supplier/contractor/their personnel/sub-contractors/agencies, the same shall be to supplier's/contractor's account only.





GENERAL:

1. *Note-1 Mode of Transport i.e. Sea / Air or otherwise and Price Basis i.e. FOB/CFR/CIF or otherwise to be decided and incorporated in bid document by SCM as per applicable guidelines/instructions.
2. *Note-2 Applicable INCOTERM to be defined by SCM.
3. *Note-3 Time period to be decided and incorporated in bid by SCM as per applicable guidelines/instructions
4. *Note-4 Contractual delivery/completion period shall include extended contractual delivery/completion period for the reasons attributable to EIL or due to Force Majeure condition.

**KEY MINIMUM MANPOWER TO BE DEPLOYED BY
THE SUB-CONTRACTOR DURING ENTIRE CONTRACT
PERIOD**

[ANNEXURE - V TO SPECIAL CONDITIONS OF CONTRACT]

KEY MANPOWER TO BE MOBILIZED BY THE CONTRACTOR DURING EXECUTION OF TENDER FOR MISCELLANEOUS CIVIL AND STRUCTURAL WORKS FOR TRINITROTOLUENE (TNT) PLANT AT HIGH EXPLOSIVES FACTORY (HEF) KHADKI OF MUNITIONS INDIA LIMITED (MIL), PUNE, MAHARASHTRA

(BIDDING DOC. NO B889-000-81-46-CF-T-8202-0)

SL. NO.	DESCRIPTION	REQUIREMENT DURING CONSTRUCTION
1.	RCM/ SITE-IN-CHARGE	1 NOS
2.	SAFETY OFFICER & OTHER SAFETY PERSONNEL	01 NOS AS PER HSE SPEC (6-82-0001 REV-2)
3.	DISCIPLINE ENGINEERS / SUPERVISORS - CIVIL - MECHANICAL - ELECTRICAL - QA/QC - PLANNING ENGINEER - LICENCED ELECTRICIAN	02 NOS 01 NOS 01 NOS 01 NOS 01 NOS 01 NOS

NOTES

- 1) The details of key manpower required to be mobilized by the contractor to complete the work within schedule. Contractor is required to augment the above list with additional numbers/categories of personnel as required and directed by Engineer-In charge to complete the work within the completion time schedule and quoted price.
- 2) The Key Construction Personnel identified above shall be well qualified & having adequate relevant experience, as specified in document "MINIMUM QUALIFICATION AND EXPERIENCE OF KEY SUPERVISORY CONSTRUCTION PERSONNEL AND PENALTY FOR THEIR NON-MOBILISATION (DOC NO: 7-82-0003) enclosed elsewhere in the bidding document. The other manpower shall also be qualified and experienced with their assigned work.
- 3) CVs of key persons proposed to be deployed shall be submitted to Owner/Engineer-In-charge prior to their mobilization at site. The mobilization of key personnel shall be done at site subject to prior approval of their CVs by Owner/Engineer-In-charge.

(STAMP & SIGNATURE OF BIDDER)

MISCELLANEOUS CIVIL AND STRUCTURAL WORKS FOR
TRINITROTOLUENE (TNT) PLANT AT HIGH EXPLOSIVES FACTORY
(HEF) KHADKI OF MUNITIONS INDIA LIMITED (MIL),
PUNE, MAHARASHTRA

**QUALIFICATION & EXPERIENCE REQUIREMENT OF KEY
CONSTRUCTION PERSONNEL AND PENALTY FOR
THEIR NON-MOBILIZATION**

[ANNEXURE –VI TO SPECIAL CONDITIONS OF CONTRACT]

प्रमुख निर्माण कार्मिकों के लिए अपेक्षित
योग्यता एवं अनुभव और तैनाती न करने पर
जुर्माना

QUALIFICATION & EXPERIENCE
REQUIREMENT OF KEY CONSTRUCTION
PERSONNEL AND PENALTY FOR THEIR NON-
MOBILIZATION

Rev. No	Date	Purpose	Prepared by	Checked by	Standards Committee Convenor	Standards Bureau Chairman
2	25.07.2025	Revised & Updated	DK	SBB	KS	MN
1	01.07.2020	Revised & Updated	DG	RK	AKK	SKS
0	12.06.2015	Doc. No. 9-1940-0001 Rev 1 has been revised and issued as Standard	DJ	RK	MD	SC

Abbreviations:

CV	:	Curriculum Vitae
EPC	:	Engineering, Procurement & Construction
EPCC	:	Engineering, Procurement, Construction & Commissioning
ISO	:	International Organization for Standardization
NDT	:	Non-Destructive Testing
QA/QC	:	Quality Assurance /Quality Control
RT	:	Radiography Testing
UT	:	Ultrasonic Testing

Construction Standards Committee

Convenor : Sh. K. Swaminathan HOD (Construction)

Members : Sh. DSN Murthy, ED (Projects)
Sh. Udayan Chakravarty, CGM (Piping)
Sh. SB Burman, Sr. GM (Construction)
Sh. Abhijit Chakraborty, GM (Construction)
Sh. Pankaj Kumar Rai, DGM (Construction)
Sh. S. Padmanathan, DGM (SCM)
Sh. Dhananjay, AGM (Construction)

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2. PENALTY FOR NON-MOBILIZATION OF KEY CONSTRUCTION PERSONNEL.... 5

Qualification & Experience (Post Qualification)

CATEGORY	QUALIFICATION & EXPERIENCE (POST QUALIFICATION) REQUIRED			
Resident Construction Manager/ Resident Engineer/Site-In-Charge	Degree or Diploma in Engineering with minimum following relevant experience in construction:			
	Awarded value (Rs) →	< 10 Cr. Works	10 - 50 Cr. Works	> 50 Cr. Works
	Degree holders	5 yrs	10 yrs	15 yrs
	Diploma holders	8 yrs	13 yrs	20 yrs
Lead Discipline Engineer (Mechanical, Civil, Electrical, Instrumentation)	Degree or Diploma in relevant Engineering discipline with following minimum experience in Construction:			
	Awarded value (Rs) →	≤ 10 Cr. Works	10-50 Cr. Works	> 50 Cr. Works
	Degree holders	3 yrs	5 yrs	10 yrs
	Diploma holders	5 yrs	8 yrs	13 yrs
Lead Welding/ NDT Engineer	Degree or Diploma in Mechanical Engineering/ Metallurgy with the minimum following experience in Welding & NDT (Non-Destructive Testing) and possessing valid Level-II certificate in the relevant NDT methodology (RT/UT)			
	Awarded value (Rs) →	≤ 10 Cr. Works	10-50 Cr. Works	> 50 Cr. Works
	Degree holders	3 yrs	5 yrs	10 yrs
	Diploma holders	5 yrs	8 yrs	13 yrs
Lead QA/QC Engineer	Degree or Diploma in Engineering with following experience (refer Note 1 also) :			
	Awarded value (Rs) →	≤ 10 Cr. Works	10-50 Cr. Works	> 50 Cr. Works
	Degree holders	3 yrs of construction experience of which minimum 1 years in QA/QC	5 yrs of construction experience of which minimum 2 years in QA/QC	10 yrs of construction experience of which minimum 3 years in QA/QC
	Diploma holders	5 yrs of construction experience of which minimum 3 years in QA/QC	8 yrs of construction experience of which minimum 5 years in QA/QC	13 yrs of construction experience of which minimum 6 years in QA/QC
Lead Planning Engineer	Degree or Diploma in Engineering with following experience in Planning & Scheduling			
	Awarded value (Rs) →	≤ 10 Cr. Works	10-50 Cr. Works	> 50 Cr. Works
	Degree holders	3 yrs	5 yrs	8 yrs
	Diploma holders	5 yrs	8 yrs	13 yrs
Safety Officer/ Supervisor	As per HSE Specification enclosed elsewhere in the bidding document.			

Warehouse- In- Charge/ Materials Manager	Diploma in Engineering or Diploma in Materials Management or Graduate in any stream with min. following experience in Warehousing/ Stores Management:			
	Awarded value (Rs) →	≤ 10 Cr. Works	10-50 Cr. Works	> 50 Cr. Works
	Experience	3 years	5 yrs.	10 yrs.
Quantity Surveyor	Degree or Diploma in Engineering with minimum following experience in quantity estimation, field measurement, bill preparation etc. in Construction field:			
	Awarded value (Rs) →	≤ 10 Cr. Works	10-50 Cr. Works	> 50 Cr. Works
	Degree holders	2 yrs	3 yrs	5 yrs
	Diploma holders	4 yrs	6 yrs	8 yrs
Discipline Engineer	Degree in relevant Engineering Discipline with minimum 2 years of relevant experience in construction or Diploma in relevant Engineering Discipline with minimum 4 years of relevant experience in Construction. Welding / NDT engineer shall possess valid Level-II certificate in the relevant NDT methodology (RT/UT).			

NOTES: (For Table)

1. For Civil & Structural, Mechanical, Composite, EPC or EPCC Contracts of value more than Rupees 50 crores, the Lead QA/QC Engineer shall be a qualified internal auditor for ISO 9001.
2. CVs of key construction personnel proposed to be deployed shall be submitted to Owner/Engineer-in-Charge prior to their mobilization at site. The mobilization of key personnel shall be done at site subject to prior approval of their CVs by Owner/Engineer-in-Charge.

PENALTY FOR NON - MOBILIZATION OF KEY CONSTRUCTION PERSONNEL

Penalty for non-mobilization per day per person after the contractual mobilization period / mobilization schedule agreed during Kick off meeting / jointly agreed between contractor and PMC / Owner based on front availability etc.

- Rs. 10000/- for Resident Construction Manager/ Resident Engineer/ Site-in-Charge.
- Rs. 5000/- for Lead QA/QC Engineer, Lead Planning Engineer, Warehouse In-charge, Lead Discipline Engineers, Lead Welding / NDT Engineer and the Quantity surveyor.
- Safety Officer (As per HSE Specification).


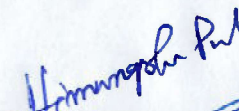
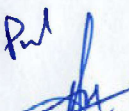
NOTES: (For Penalty Clauses)

- a) All intervening off days (Sundays etc.) and holidays will be counted for levy of penalty.
- b) Mobilized personnel shall not be demobilized till contractual completion or based on consent of Engineer-in-Charge, else penalties as above shall be applied.
- c) Total of above penalties shall not exceed 2% of the awarded contract value.

QUALITY MANAGEMENT SYSTEM
[ANNEXURE –VII TO SPECIAL CONDITIONS OF CONTRACT]

बोलीकर्ता / आपूर्तिकर्ताओं / ठेकेदारों से गुणवत्ता प्रबंधन
प्रणाली अपेक्षाओं हेतु विनिर्देश

SPECIFICATION FOR QUALITY MANAGEMENT SYSTEM REQUIREMENTS FROM BIDDERS / SUPPLIERS / CONTRACTORS

3	29-09-2025	General Revision	 QMS Standards Committee	 QMS Standards Committee	 AK	MN
2	12-06-2020	General Revision	QMS Standards Committee	QMS Standards Committee	SKB	SKS
1	12-03-2015	General Revision	QMS Standards Committee	QMS Standards Committee	MPJ	SC
0	04-06-2009	Issued as Standard Specification	QMS Standards Committee	QMS Standards Committee	SCT	ND
Rev. No.	Date	Purpose	Prepared by	Checked by	Standards Committee Convener	Standards Bureau Chairman
Approved by						

Abbreviations:

EIL	Engineers India Limited
ISO	International Organization for Standardization
MR	Material Requisition
PO	Purchase Order
PR	Purchase Requisition
QMS	Quality Management System

QMS Standards Committee

Convener: Mr. Anil Kumar

Members: Mr. Himangshu Pal (SCM-Inspection)
Mr. Ravindra Kumar (Const.)
Mr. Vinod Kumar (CQA)
Mr. Swapnil Vaishnav (Projects)
Mr. Vijay Kumar Garg (SCM)
Mr. Raju Kumar Pandey (Equipment Division)

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1.0 SCOPE

This specification establishes the Quality Management System requirements to be met by BIDDER for following purpose:

- QMS requirements to be met by suppliers/contractors after award of work/during contract execution.

2.0 DEFINITIONS

2.1 Bidder

For the purpose of this specification, the word “BIDDER” means the person(s), firm, company or organization who is under the process of being contracted by EIL / Owner for delivery of some products (including service). The word “Bidder” is considered synonymous to supplier, contractor or vendor.

2.2 Project Quality Plan (PQP)

Document tailored from Standard Quality Management System Manual of BIDDER, specifying how the quality requirements of the project will be met.

2.3 Owner

Owner means the owner of the project for which services / products are being purchased and includes their representatives, successors and assignees.

3.0 REFERENCE DOCUMENTS

- Specification for Documentation Requirements from Contractors (Doc. No. 6-78-0002)
- Specification for Documentation Requirements from Suppliers (Doc. No. 6-78-0003)

4.0 QUALITY MANAGEMENT SYSTEM – GENERAL

Unless otherwise agreed with EIL / Owner, the BIDDER proposed quality system shall fully satisfy all relevant requirements of ISO 9001 “Quality Management Systems – Requirements.” Evidence of compliance shall be current certificate of quality system registration to ISO 9001 or a recent compliance audit recommending registration from a certification agency. The quality system shall provide the planned and systematic control of all quality related activities for execution of contract. Implementation of the system shall be in accordance with BIDDER’S Quality Manual and PROJECT specific Quality Plan.

5.0 QUALITY SYSTEM REQUIREMENTS

5.1 BIDDER shall prepare and submit for review / record, Project Quality Plan / Quality Assurance Plan for contracted scope / job. The BIDDER’S Quality Plan shall address all of the applicable elements of ISO 9001, identify responsible parties within BIDDER’S organization, for the implementation / control of each area, reference the applicable procedures used to control / assure each area, and verify the documents produced for each area. The Project Quality Plan shall necessarily define control or make reference to the relevant procedures, for design and engineering, purchase, documentation, record control, bid evaluation, inspection, production/manufacturing, preservation, packaging and storage, quality control at construction site, pre-commissioning, commissioning and handing over (as applicable) in line with contract requirement and scope of work.

- 5.2 BIDDER shall identify all specified or implied statutory and regulatory requirements and communicate the same to all concerned in his organization and his sub contractor's organization for compliance.
- 5.3 BIDDER shall deploy competent and trained personnel for various activities for fulfilment of PO / contract. BIDDER shall arrange adequate infrastructure and work environment to ensure that the specification and quality of the deliverable are maintained.
- 5.4 BIDDER shall do the quality planning for all activities involved in delivery of order. The quality planning shall cover as minimum the following:
- Resources
 - Product / deliverable characteristics to be controlled.
 - Process characteristics to ensure the identified product characteristics are realized
 - Identification of any measurement requirements, acceptance criteria
 - Records to be generated
 - Need for any documented procedure
- The quality planning shall result into the quality assurance plan, inspection and test plans (ITPs) and job procedures for the project activities in the scope of bidder. These documents shall be submitted to EIL/Owner for review/approval, before commencement of work.
- 5.5 Requirements for sub-ordering of outsourced items /sub-contracting / purchasing of services specified in MR/ contract / tender shall be adhered to. In general all outsourced items will be from approved vendors of EIL. Wherever requirements are not specified, or approved sub vendors do not exist, the sub-contractor shall establish and maintain a system for purchasing / sub-contracting to ensure that purchased product / service conforms to specified requirements in concurrence with EIL / Owner. Criteria for selection of sub-contractor, evaluation, re-evaluation, maintenance of purchasing data and verification of purchased product (sub-contractor services), constitute important components of this requirement.
- 5.6 BIDDER shall plan and carry production and service provision under controlled conditions. Controlled conditions shall include, as applicable
- a) the availability of information that describes the characteristics of the product
 - b) the availability of work instructions
 - c) the use of suitable equipment
 - d) the availability and use of monitoring and measuring devices
 - e) the implementation of monitoring and measurement
 - f) the implementation of release, delivery and post-delivery activities
- 5.7 BIDDER shall validate any processes for production and service provision where resulting output cannot be verified by subsequent monitoring and measurement. This includes any process where deficiencies become apparent only after the product is in use or service has been delivered.
- 5.8 BIDDER shall establish a system for identification and traceability of product / deliverable throughout product realization. Product status with respect to inspection and testing requirements shall be identified.
- 5.9 BIDDER shall identify, verify, protect and safeguard EIL / Owner property (material / document) provided for use or incorporation into the product. If any Owner / EIL property is lost, damaged or otherwise found to be unsuitable for use, this shall be reported to the EIL / Owner.

BIDDER shall ensure the conformity of product / deliverable during internal processing and delivery to the intended destination. Requirements mentioned in the MR/ tender shall be adhered to.

- 5.10 BIDDER shall establish system to ensure that inspection and testing activities are carried out in line with requirements. Where necessary, measuring equipment shall be calibrated at specified frequency, against national or international measurement standards; where no such standard exists, the basis used for calibration shall be recorded. The measuring equipment shall be protected from damage during handling, maintenance and storage.
- 5.11 BIDDER shall ensure effective monitoring, using suitable methods, of the processes involved in production and other related processes for delivery of the scope of contract.
- 5.12 BIDDER shall monitor and measure the characteristics of the product/deliverable to verify that product requirement has been met. The inspection (stage as well as final) by BIDDER and EIL / Owner personnel shall be carried out strictly as per the approved ITPs or ITPs forming part of the contract. Product release or service delivery shall not proceed until the planned arrangements have been satisfactorily completed, unless otherwise approved by relevant authority and where applicable by Owner / EIL.
- 5.13 BIDDER shall establish and maintain a documented procedure to ensure that the product which does not conform to requirements is identified and controlled to prevent its unintended use or delivery
- 5.14 All non-conformities (NCs) / deficiencies found by the BIDDER'S inspection / surveillance staff shall be duly recorded, including their disposal action shall be recorded and resolved suitably. Effective corrective actions shall be implemented by the BIDDER so that similar NCs including deficiencies do not recur. The BIDDER shall take appropriate actions to address the Risks and Opportunities in the project.
- 5.15 All deficiencies noticed and reported by EIL / Owner shall be analysed by the BIDDER and appropriate corrective actions shall be implemented. BIDDER shall intimate EIL / Owner of all such corrective action implemented by him.
- 5.16 BIDDER should follow the standards, specifications and approved drawings. Concessions/Deviations shall be allowed only in case of unavoidable circumstances. In such situations Concession/deviation request must be made by the BIDDER through online system of EIL vendor portal for document exchange. URL of EIL vendor portal for document exchange is <http://edocx.eil.co.in/vportal>. BIDDER shall have documented procedure for control of documents.
- 5.17 All project records shall be carefully kept, maintained and protected for any damage or loss until the project completion, then handed over to EIL / Owner as per contract requirement (Refer Specification Nos. 6-78-0002 - Specification for Documentation Requirements from Contractors and 6-78-0003 - Specification for Documentation Requirements from Suppliers), or disposed as per relevant project procedure.

6.0 AUDITS

BIDDER shall plan and carry out the QMS audit for the job. Quality audit program shall cover design, procurement, construction management and commissioning as applicable including activities carried out by sub-vendors and sub-contractors. This shall be additional to the certification body surveillance audits carried out under BIDDER'S own ISO 9001 certification scheme.

The audit programs and audit reports shall be available with bidder for scrutiny by EIL / Owner. EIL or Owner's representative reserves the right to attend, as a witness, any audit conducted during the execution of the WORKS.

In addition to above, EIL, Owner and third party appointed by EIL/Owner may also perform Quality and Technical compliance audits. BIDDER shall provide assistance and access to their systems and sub-contractor / vendor systems as required for this purpose. Any deficiencies noted shall be immediately rectified by BIDDER.

7.0 DOCUMENTATION REQUIREMENTS

BIDDER shall submit following QMS documents immediately after award of work (Within one week) for record / review by EIL / Owner/ TPIA(Third Party Inspection Agency), as applicable:

- Organization chart (for complete organization structure and for the project)
- Project Quality Plan/Quality Assurance Plan
- Job specific Inspection Test Plans, if not attached with PR
- Job Procedures
- Inspection/Test Formats

In addition to above QMS documents, following documentation shall be maintained by the BIDDER for submission to EIL / Owner on demand at any point of time during execution of the project:

- Quality Manual
- Certificate of approval for compliance to ISO9001 standard
- Procedure for Control of Non-conforming Product
- Procedure for Control of Documents
- Sample audit report of the QMS internal and external audits conducted during last one year
- Customer satisfaction reports from at least 2 customers
- Project QMS audit report
- Technical audit reports for the project
- Corrective action report on the audits

Documents as specified above are minimum requirements. BIDDER shall submit any other document/data required for completion of the job as per EIL/Owner instructions.

KEY EQUIPMENTS TO BE MOBILIZED BY THE SUB- CONTRACTOR DURING ENTIRE CONTRACT PERIOD

[ANNEXURE - VIII TO SPECIAL CONDITIONS OF CONTRACT]

KEY EQUIPMENTS TO BE MOBILIZED BY THE CONTRACTOR DURING EXECUTION OF TENDER FOR MISCELLANEOUS CIVIL AND STRUCTURAL WORKS FOR TRINITROTOLUENE (TNT) PLANT AT HIGH EXPLOSIVES FACTORY (HEF) KHADKI OF MUNITIONS INDIA LIMITED (MIL), PUNE, MAHARASHTRA.

(BIDDING DOC. NO B889-000-81-46-CF-T-8202-0)

SL NO	EQUIPMENT DESCRIPTION	CAPACITY	REQUIREMENT
1	Hydraulic Excavator with rock/concrete breaking attachment	0.7-1.2 M3	1
3	Tools and tackles for excavation by controlled blasting		As Required
4	Dumper		As Required
5	Rock Body Dumper		As Required
6	Hydraulic Crane (TRX/Kato etc.)	10-18 MT	As Required
7	Crane	40-75 MT	As Required
8	Crane	100-150 MT	As Required
9	Hydraulic/Pneumatic Pile Head Breaker		1
10	Tractor Trailer with hydraulic unloading		2
11	Trailer		As Required
12	Tower Crane		As Required
13	Boom Lift		As Required
14	Boom Placer		As Required
15	Concrete Pump		As Required
16	Vibro / Road Roller	8-10 Ton	As Required
17	Mini Roller	1 Ton	1
18	RMC Plant / Supplier	30 M3/hr	1
19	Transit Mixer	6 M3	As Required
20	Hot Mix Plant / Supplier		As Required
21	Mixer Machine with Weigh Batcher		1
22	Plate Compactor		2
23	Needle Vibrators		4
24	Bar Cutting & Bending Machine		2
25	Water Tankers		1
26	Total Station		1
27	Auto Level		2
28	Welding Machine		1
29	Grinding Machine		2
30	Gas Cutting Set		1
31	Air Compressor		As Required
32	Blast Cleaning Equipment		As Required
33	DG Set	25-65 KVA	As Required
34	Tools for Painting as per SOR		As Required
35	Spray Painting Machine (Airless)		As Required

SL NO	EQUIPMENT DESCRIPTION	CAPACITY	REQUIREMENT
36	X-Ray Source for Radiography		As Required
37	Profile Gauge		1
38	Hygrometer		1
39	Elcometer		1
40	Jackhammer		As Required
41	Water Filling Pump		As Required
42	Dewatering Pump		As Required
43	Tools for shoring & strutting		As Required
44	Tools for anchor fasteners		As Required
45	Tools for chemical rebarring		As Required
46	Tools for centering & shuttering		As Required
47	Tools for false ceiling/flooring		As Required
48	Tools for tiling/stone work		As Required
49	Tools for carpentry works		As Required
50	Tools for plumbing works		As Required
51	Tools for epoxy coating		As Required
52	Tools for antitermite treatment		As Required
53	Tools for HDPE pipe jointing		As Required
54	Tools for DPT/MPT		As Required
55	Tools for aluminium works		As Required
56	Tools for RCC cutting/chipping		As Required
57	Tools for stone/tile works		As Required
58	Tools for GI piping works		As Required
59	Tools for waterproofing		As Required
60	Tools for cladding/facade		As Required
61	Tools for ACP works		As Required
62	Tools for roofing/cladding		As Required
63	Tools for AC installation		As Required
64	3 Terminal Earth Tester		As Required
65	Digital Multimeter		As Required
66	Tong Tester	0-300 AMP	As Required
67	Earth Discharge Rod		As Required
68	Lux Meter		As Required
69	Panel Shifting Trolley		As Required
70	Underground Pipe Locator		As Required
71	Underground Cable Locator		As Required
72	Crimping Tool (Manual/Hydraulic)		As Required
73	Leakage Current Detector		As Required
74	Cable Pulling Rollers		As Required
75	Lifting Jack for cable drum		As Required
76	Electrician Tool Kit		As Required
77	Instrumentation Tool Kit		As Required
78	Portable Drill Machine & Hole Cutter		As Required
79	Insulation Resistance Megger		As Required
80	Laboratory Equipment		As Required
81	Torquing Machine		As Required

NOTES

1. The details of key construction equipments in good working condition, required to be mobilized by the Contractor, to complete the work within the schedule. The actual deployment schedule of Construction Equipments shall be approved by Engineer-in-charge. Contractor shall augment the above list with additional numbers/categories/capacities of equipments, tools & tackles, as required and directed by Engineer-In charge to complete the work within the completion time schedule and quoted price.
2. Contractor to confirm that the above equipments are available with him in good working condition and shall be timely mobilized on this project site. Contractor has the option to hire some of these equipments form equipment-hiring agencies also.
3. Owner/EIL reserves the right to physically check & verify the availability of these equipments prior to award of work.
4. Contractor shall replace any defective/damaged equipments promptly to complete the work without any time & cost implication to the Owner/EIL.
5. Construction equipment identified above shall be mobilized by contractor as and when relevant activities are required to be carried out for completing the job within completion time schedule and as per direction of Engineer In-charge.
6. Instruments (as applicable) to be made available with valid calibration certificate, issued by NABL accredited laboratory.

(STAMP & SIGNATURE OF BIDDER)

**CALIBRATION REQUIREMENTS OF MONITORING AND
MEASURING DEVICES AT CONSTRUCTION SITE**

[ANNEXURE -IX TO SPECIAL CONDITIONS OF CONTRACT]

निर्माण स्थलों पर निगरानी और मापने के उपकरणों की आंशांकन आवश्यकताएँ

CALIBRATION REQUIREMENTS OF MONITORING AND MEASURING DEVICES AT CONSTRUCTION SITES

2	25.07.2025	Revised & Updated	DK	SBB	KS	MN
1	02.07.2020	Revised & Updated	DG	RK	AKK	SKS
0	28.04.2015	Doc. No. 9-1940-0030 Rev 0 has been issued as Standard	DJ	SNB	MD	SC
Rev. No	Date	Purpose	Prepared by	Checked by	Standards Committee Convenor	Standards Bureau Chairman
					Approved by	

Abbreviations:

BIS	:	Bureau of Indian Standard
NABL	:	National Accreditation Board for Testing and Calibration Laboratories
CEIL	:	Certification Engineers International Ltd.
LRS	:	Llyod's Register Group Limited
BV	:	Bureau Veritas
ABS	:	ABS Consultancy
DNV	:	Det Norske Veritas
IRS	:	Indian Registrar for Shipping
PMI	:	Positive Material Identification

Construction Standards Committee

Convenor : Sh. K. Swaminathan HOD (Construction)

Members : Sh. DSN Murthy, ED (Projects)
Sh. Udayan Chakravarty, CGM (Piping)
Sh. SB Burman, Sr. GM (Construction)
Sh. Abhijit Chakraborty, GM (Construction)
Sh. Pankaj Kumar Rai, DGM (Construction)
Sh. S. Padmanathan, DGM (SCM)
Sh. Dhananjay, AGM (Construction)

1.0 SCOPE

The standard covers the calibration requirement of monitoring & measuring devices used by construction contractor during implementation of construction works under their scope.

2.0 Requirement for control of monitoring and measuring devices.

Sl. No.	Description	Calibration requirements	Frequency	Remarks
A.	Civil-Survey			
A.1.	Theodolite	To check for permanent adjustments by traversing and observing the closing error. (Refer Note).	Once in a year or project duration whichever is earlier.	Record to be maintained
A.2.	Level Instruments (Auto Level / Dumpy Level)	To check by backsight / foresight readings, the temporary adjustments of level. (Refer Note).	Every use.	Record to be maintained
A.3.	Steel measurement tapes	---	---	a. "Freemans" make or BIS approved make shall be used. b. Mutilated, or broken tapes shall not be used. c. Marking on the tape shall be legible.
A.4.	Cross staff	---	---	Same as 3b & 3c above.
A.5.	Distomat	Actual Physical Verification at Site.	Before using first time at site.	Records to be maintained.
A.6.	Total Station	To check for permanent adjustments by traversing and observing the closing error, etc. (Refer Note).	Once in a year or project duration whichever is earlier.	Record to be maintained
B.	Civil Laboratory			
B.1.	All balances - Mechanical	Check for zero error	Whenever used.	---
B.2.	Weigh Batchter / Batching Plant	Calibration of scales	Once in three Months.	Records to be maintained.
B.3.	Cube testing machine	Calibration certificate from manufacturers or from calibrating laboratories / agency. (Refer Note).	As per manufacturer specification or once a year whichever is earlier	Records to be maintained.
B.4.	Moisture Meter	Calibration of scales .	6 months.	Records to be maintained.
B.5.	Vicat Appratus	Calibration certificate from manufacturers or from calibrating laboratories / agency. (Refer Note).	As per manufacturer specification or once a year whichever is earlier.	Records to be maintained.

Sl. No.	Description	Calibration requirements	Frequency	Remarks
C.	Mechanical/ Electrical/Welding			
C.1	Pressure gauges/ Pressure Safety valve/ Pressure relief valve	Calibration certificate from calibrating laboratories / agencies or calibrate by dead weight testers with standard weights or with master Gauge. (Refer Note)	Once in 6 months	Records to be maintained.
C.2	Dial gauges	Check for Zero error.	Whenever used	---
C.3	Dead weight tester	Calibration from manufacturer or calibrating laboratories / agency. Calibration certificate shall not be older than one month from the date of mobilization. (Refer Note).	As per manufacturer's recommendation or once in a six month whichever is earlier.	Records (Calibration certificate) to be maintained.
C.4	Vernier caliper / screw gauge	Check for Zero error.	Whenever used.	---
C.5	Holiday tester	Calibration from manufacturer or calibrating laboratories / agency or calibration by zeep meter. (Refer Note).	Once in 6 months.	Records to be maintained.
C.6	Elcometer	Check with standard test films supplied by the manufactures.	Before use.	Records to be maintained.
C.7	Universal Testing machine	Calibration Certificate from various third-party inspection agency. Viz. CEIL, LRS, BV, ABS, DNV or IRS etc.	As per manufacturer's recommendation or once a year whichever is earlier.	Records to be maintained.
C.8	Charpy V-notch Impact testing machine.	Calibration Certificate from various third party inspection agency. Viz. CEIL, LRS, BV, ABS, DNV or IRS etc.	As per manufacturer's recommendation or once in a year whichever is earlier.	Records to be maintained.
C.9	Hardness Testing machine.	Check with the standard test block supplied with the machine as per manufacturer's Recommendation.	Before use.	Records to be maintained.
C.10	Chemical Analysis, ex : PMI etc.	Check with the standard samples.	Before use.	Records to be maintained.
C.11	Various Digital and Analog meters.	Calibration Certificate from calibrating laboratories / agencies or the Manufacturer (Refer Note).	Once in Six Months or as per manufacturer's recommendation whichever is earlier.	Records to be maintained.

Sl. No.	Description	Calibration requirements	Frequency	Remarks
C.12	HIPOT Kit, Multimeter/ Clampmeter, Ohmicron Kit, CT Analyser, CRM Kit, BDV Kit, Tachometer etc.	Calibration Certificate from calibrating laboratories / agencies (Refer Note).	Once in Six months.	Records to be maintained.
C.13	Temperature / Pressure recorders	Calibration from manufacturer or any calibrating laboratories / agency (Refer Note).	Once in Six months.	Records to be maintained
C.14	Temperature gauges	Calibration Certificate from calibrating laboratories / agencies (Refer Note).	Once in Six months.	To be discarded in case of damage or malfunctioning.
C.15	Thermocouples	Manufacturer's Certificate or Chemical Check	---	---
C.16	Vibration probes	Calibration from calibrating laboratories / agencies (Refer Note).	Once in a year.	To be discarded in case of damage or Malfunctioning.
C.17	Decibel-Meter	Calibration from calibrating laboratories / agencies (Refer Note).	Once in a year.	To be discarded in case of damage or Malfunctioning.
C.18	Manual Torque Wrench / Electric Torque Machine	Calibration from manufacturer or any calibrating laboratories / agency (Refer Note).	As per manufacturer's recommendation or once in a year whichever is earlier.	Records to be maintained
C.19	Mother Oven	Calibration from manufacturer or any calibrating laboratories / agency (Refer Note).	As per manufacturer's recommendation or once in a year whichever is earlier.	Records to be maintained.

Note: If an instrument is out of acceptance limit as per instrument data sheet, it has to be sent to manufacturers or their authorized agents (Calibrating laboratories/ agency) or to any other lab/ agency for recalibration/ rectification and certification. The calibrating laboratory/ agency shall be NABL accredited or any other lab accredited as per ISO/IEC:17025 by any of the National/ International accreditation body for relevant testing.

**CONDITIONS FOR ISSUE AND RECONCILIATION OF
MATERIALS - DELETED**




**MISCELLANEOUS CIVIL & STRUCTURE WORKS FOR
TRINITROTOLUENE (TNT) PLANT AT HIGH EXPLOSIVES
FACTORY (HEF) KHADKI OF MUNITIONS INDIA LIMITED (MIL),
PUNE, MAHARASHTRA**

DOCUMENTATION REQUIREMENT FROM CONTRACTOR

[ANNEXURE -XI TO SPECIAL CONDITIONS OF CONTRACT]

ठेकेदारों से प्रलेखन
अपेक्षाओं हेतु विनिर्देश

SPECIFICATION FOR DOCUMENTATION REQUIREMENTS FROM CONTRACTORS

3	29-09-2025	General Revision	 QMS Standards Committee	 QMS Standards Committee	 AK	MN
2	12-06-2020	General Revision	QMS Standards Committee	QMS Standards Committee	SKB	SKS
1	12-03-2015	General Revision	QMS Standards Committee	QMS Standards Committee	MPJ	SC
0	04-06-2009	Issued as Standard Specification	QMS Standards Committee	QMS Standards Committee	SCT	ND
Rev. No.	Date	Purpose	Prepared by	Checked by	Standards Committee Convener	Standards Bureau Chairman
Approved by						

Abbreviations:

DEC	Detailed Engineering Contractor
DCI	Document Control Index
EIL	Engineers India Limited
EPCC	Engineering Procurement Construction Contract
FOA	Fax of Acceptance
IC	Inspection Certificate
IRN	Inspection Release Note
ITP	Inspection and Test Plan
LOA	Letter of Acceptance
LSTK	Lumpsum Turnkey
ODC	Over Dimension Consignment
PMC	Project Management Consultancy
QMS	Quality Management System
URL	Universal Resource Locator

QMS Standards Committee

Convener: Mr. Anil Kumar

Members: Mr. Himangshu Pal (SCM-Inspection)
Mr. Ravindra Kumar (Const.)
Mr. Vinod Kumar (CQA)
Mr. Swapnil Vaishnav (Projects)
Mr. Vijay Kumar Garg (SCM)
Mr. Raju Kumar Pandey (Equipment Division)

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2.0	DEFINITIONS	4
3.0	REFERENCE DOCUMENTS	4
4.0	DOCUMENTATION AND DATA REQUIREMENTS	4

Annexures:

S. No.	Title	Doc. No.
1.	Format for completeness of Final Documentation	Format No. 3-78-0004

1.0 SCOPE

This specification establishes the Documentation Requirements from Contractors.

All documents/data against the Tender / Contract shall be developed and submitted to EIL/Owner by the contractor for review / records, in line with this specification.

2.0 DEFINITIONS

2.1 Contractor

For the purpose of this specification, the word “CONTRACTOR” means the person(s), firm, company or organization who has entered into a contract with EIL / Owner for delivery of some products and services. The word is considered synonymous to bidder, supplier or vendor.

2.2 Owner

Owner means the owner of the project for which services / products are being purchased and includes their representatives, successors and assignees.

3.0 REFERENCE DOCUMENTS

- Specification for Quality Management System Requirements from Bidders (Doc. No. 6-78-0001)

4.0 DOCUMENTATION AND DATA REQUIREMENTS

4.1 Order Acknowledgement and Assigning Project Manager

After placement of order, Contractor shall acknowledge order through V-Portal within 7 days of receipt of FOA/PO. Contractor shall assign a Project Manager for that order through online portal and provide requisite details. Project Manager details shall include e-mail address, mailing address, mobile/telephone nos., fax nos. and name of Project Manager. All the system generated emails pertaining to that order shall be sent to the assigned Project Manager.

4.2 Documents/Data to be submitted by the Contractor

4.2.1 The contractor shall submit the documents and data against the Tender/Contract as per the list specified in respective Tender/Contract.

4.2.2 Review of the contractor drawings / Documents by EIL would be only to review the compatibility with basic designs and concepts and in no way absolve the contractor of his responsibility/contractual obligation to comply with Tender/Contract requirements, applicable codes, specifications and statutory rules/regulations. Any error/deficiency noticed during any stage of manufacturing/execution/ inspection / installation shall be promptly corrected by the contractor without any extra cost or time, whether or not comments on the same were received from EIL during the drawing review / inspection stage.

4.2.3 Unless otherwise specified, submission of documents for Review/Records shall commence as follows from the date of Fax of Intent /Letter of Intent/ Fax of Acceptance (FOA)/ Letter of Acceptance (LOA):

QMS	-	1 week
Document Control Index	-	2 weeks
Other Documents/Drawings	-	As per approved Document Control Index

4.2.4 Documents as specified in Tender/Contract are minimum requirements. Contractor shall submit any other document/data required for completion of the job as per EIL/Owner instructions.

4.3 Style and Formatting

4.3.1 All Documents shall be in ENGLISH language and in M.K.S System of units.

4.3.2 Before submitting the drawings and documents, contractor shall obtain the title block from EIL and ensure that the following information are properly entered in each drawing:

- Tender Number
- Name of Equipment / Package
- Equipment / Package Tag No.
- Name of Project
- Owner
- Main Contractor (if work is sub-contracted)
- Drawing / Document Title
- Drawing / Document No.
- Drawing / Document Revision No. and Date

4.4 Review and Approval of Documents by Contractor

4.4.1 All the Drawing/Documents shall be reviewed, checked, approved and duly signed/stamped by contractor before submission. Revision number shall be changed during submission of the revised contractor documents and all revisions shall be highlighted by clouds. Whenever there is a requirement of any sub-contractor/DEC drawings to be reviewed by EIL, the same shall be submitted by the contractor duly reviewed, approved and stamped by the sub-contractor/DEC and the contractor. Direct submission of sub-contractor's drawings without contractor's approval shall not be entertained.

4.5 Transportation Plan

Transportation Plan for Over Dimensional Consignments (ODC), if any, shall be submitted within 2 weeks of receiving FOA / LOA, for approval. Unless otherwise mentioned, consignments with parameters greater than following shall be considered as over dimensional.

Dimensions : 4 meters width x 4 meters height x 20 meters length

Weight : 32 MT (Metric Ton)

Dimensions and weight provided above are inclusive of all nozzles, attachments, transportation saddles etc.

Physical Route survey for ODC movement shall be submitted to EIL within 8 weeks of receiving FOA / LOA.

4.6 Document Category

Following review codes shall be used for review of contractor Drawings/Documents:

- | | | |
|---------------|---|---|
| Code 1 | - | No comments. Proceed with Manufacture/ Fabrication/ Construction as per the document. |
| Code 2 | - | Proceed with Manufacture/Fabrication/Construction as per commented document. Revised document required. |

- Code 3** - Document does not conform to basic requirements as marked. Resubmit for review.
- Code R** - Document is retained for Records. Proceed with Manufacturing/ fabrication as per Tender/ Contract Requirement.
- Code V** - Void, Document is returned as invalid.

Document is marked as Void under following conditions:

- a) Wrong item drawing uploaded.
- b) Superseded or obsolete submission.
- c) Duplicate submission.
- d) Out of sequence submission.
- e) Mismatch in document name and title under which document uploaded.
- f) Document not legible.
- g) For PMC projects, document not signed and stamped by contractor and DEC

4.7 Methodology for Submission of Documents to EIL/Owner

4.7.1 Document Control Index (DCI)

Contractor shall create and submit Document Control Index (DCI) for review based on PO/PR/MR along with schedule date of submission of each drawing/document on EIL Vendor Portal. The DCI shall be specific with regard to drawing/document no. and the exact title. Proper sequencing of the drawings/documents should be ensured in schedule date of submission.

4.7.2 Submission of Drawings/Documents / Data

Drawings/documents, data and DCI shall be uploaded on the EIL Vendor Portal. The detail guidelines for uploading documents on EIL Vendor Portal are available on following URL:

<http://edocx.eil.co.in/vportal>

4.7.3 Statutory Approvals

Wherever approval by any statutory body is required to be taken by Contractor, the Contractor shall submit copy of approval by the authority to EIL.

4.7.4 Schedule and Progress Reporting

Contractor shall submit monthly progress report (MPR) and updated procurement, engineering and manufacturing status (schedule vs. actual) and highlight constraints, if any, along with action plan for mitigation, to the EIL / Owner by 1st week of every month. One month Look-ahead schedule including the mobilization plan shall be submitted within 2 weeks from FOA / LOA. In case of exigencies, EIL/Owner can ask for report submission as required on weekly/fortnightly/ad-hoc basis depending upon supply status and contractor shall furnish such reports promptly without any price implication. Format for progress report shall be submitted by the contractor during kick off meeting or within one week of receiving FOA/LOA, whichever is earlier.

Contractor shall submit progress reports including Daily Progress Reports (DPR) through planning portal. "EIL CP Contractor Daily Update System" available in following url: <https://www6.eil.co.in/CDUS/>

4.7.5 Quality Assurance Plan/Inspection and Test Plan

Inspection and test plans attached if any, to the tender are generic and indicative only. Immediately after receipt of the order, contractor shall submit within one week of receiving FOA/LOA, job specific ITPs based on the indicative ITPs. Further, contractor shall also submit Quality Assurance Plan for project activities in the scope of contract, starting from manufacturing to handing over/ commissioning, these plans shall cover/identify the activities, relevant procedure, if any, code of conformance, resources for performance and checking/monitoring, approval requirements and authority, records to be generated and audit scope by EIL/Owner.

For EPCC/LSTK/Package contracts, the contractor shall prepare a list of items/ equipment and their inspection categorization plans for all items included in the scope of supply immediately after receipt of order and obtain approval for the same from EIL. The items shall be categorized into different categories depending upon their criticality for the scope of inspection of TPIA and/or EIL.

4.7.6 Inspection Release Note (IRN)/ Inspection Certificate (IC)

Contractor shall ensure that all documents viz. documents reviewed, manufacture's test certificate etc., mentioned in Inspection Release Note(IRN), issued by EIL/third party against the materials supplied by contractor, are sent to EIL along with the IRN.

IRN/ IC shall be issued by EIL Inspector/ third party inspection agency only after all the drawings/documents as per DCI are submitted and are accepted under review code-1 & code R. Material/Equipment dispatch from contractor's/sub vendor's works shall not commence till above condition is met.

Note 1: Nonfulfilling above requirement shall result into appropriate penalty or with- holding of payment as per conditions of Tender/Contract.

Note 2: For items where IRN/IC is issued by TPIA, supplier to ensure that following as a minimum must be mentioned by TPIA in IRN/IC

- a) Tender document number
- b) List of drawings / documents with EIL approval code
- c) Tests witnessed, documents reviewed
- d) Compliance statement by TPIA that product meets the requirement as specified in EIL standard specifications, Inspection Test Plan / Quality Assurance Plan (QAP) and approved documents.

4.7.7 Pre-Commissioning& Commissioning Activities Management System (PCAMS)

Pre-Commissioning& Commissioning activities management system software shall be followed for Mechanical completion, check listing of loops, punch points, hydro test and issue of Formats during the Pre-Commissioning and Commissioning activities and the same can be accessed on following URL

<https://pcams.eil.co.in/>

4.8 Final Documentation

4.8.1 As built Drawings

Minor Shop/Site changes made by contractor after approval of drawings under 'Code 1' by EIL and deviations granted through online system, if any, shall be marked in hard copies of drawings which shall then be stamped 'As-built' by the contractor. These 'As-built' drawings shall be reviewed and stamped by EIL Inspector/Site engineer/TPIA also, as the case may be. Format for completeness of final documents (Format No. 3-78-0004) is attached with this specification. Contractor shall prepare scanned images files of all marked – up 'As – built' drawings. Simultaneously contractor shall incorporate the shop/site changes in the native soft files of the drawings also.

4.8.2 As built Final Documents

As built final documents shall be submitted as listed in Tender/Contract

4.8.3 Packing/Presentation of Final Documents

Final Documents shall be legible photocopies in A4, A3 size only. Drawings will be inserted in plastic pockets (both sides transparent, sheet thickness minimum 0.1 mm) with an extra strip of 12 mm wide for punching so that drawings are well placed.

Final Documentation shall be bound in hard board plastic folder(s) of size 265 mm x 315 mm (10½-inch x 12½-inch) and shall not be more than 75 mm thick. It may be of several volumes and each volume shall have a volume number, index of volumes and index of contents of that particular volume. Where numbers of volumes are more, 90mm thickness can be used. Each volume shall have top Poly Vinyl Chloride (PVC) sheet of minimum 0.15 mm thick duly fixed and pressed on folder cover and will have 2 lever clips. In case of imported items documents, 4 lever clip shall also be accepted. All four corners of folders shall be properly metal clamped. Indexing of contents with page numbering must be incorporated by contractor. Spiral/Spico bound documents shall not be acceptable. As mentioned above, books should be in hard board plastic folders with sheets punched and having 2/4 lever clips arrangement.

Each volume shall contain on cover a title block indicating Tender No., name of project, name of customer, package equipment tag no. & name (if applicable). Each volume will have hard front cover and a reinforced spine to fit thickness of book. These spines will also have the title printed on them. Title shall include also volume number (say 11 of 15) etc.

4.8.4 Submission of Soft copies

Contractor shall submit to EIL, the scanned images files as well as the native files of drawings/documents, along with proper index.

In addition to hard copies, contractor shall submit soft copies of all the final drawings and documents in pen drive or any other specified medium with proper identification tag, all text documents prepared on computer, scanned images of all important documents (not available as soft files), all relevant catalogues, manuals available as soft files (editable copies of drawings/text documents, while for catalogues/manuals/proprietary information and data PDF files can be furnished). All soft files shall be appropriately named, systematically indexed, and duly bookmarked in PDF format to facilitate ease of reference and access.

All the above documents shall also be uploaded on the EIL Vendor Portal and if applicable on Client Server also.

4.8.5 Completeness of Final Documentation

Contractor shall get the completeness of final documentation verified by EIL/TPIA and attach the Format for Completeness of Final Documentation (Format No. 3-78-0004) duly signed by EIL or TPIA as applicable to the final document folder.

COMPLETENESS OF FINAL DOCUMENTATION

Name of Supplier/Contractor :
Customer :
Project :
EIL's Job No. :
Purchase Order No./
Contract No. :
Purchase Requisition No./
Tender No. : Rev. No.:

Name of the Work/ Equipment :
Tag. No. :
Supplier's/ Contractor's Works :
Order No. :

Certified that the Engineering Documents/ Manufacturing & Test Certificates submitted by the supplier (as per Index sheet mentioned in Annexure-1) are complete in accordance with the Vendor Data Requirements of Purchase Requisition / Tender.

Signature	:	Signature	:
Date	:	Date	:
Name	:	Name	:
Designation	:	Designation	:
Department	:	Department	:

Supplier/Contractor

EIL/TPIA

**PROCUREMENT of TMT BARS, CEMENT AND STRUCTURAL
STEEL BY CONTRACTOR**

[ANNEXURE –XII TO SPECIAL CONDITIONS OF CONTRACT]

Annexure-I

CONTRACT CLAUSE FOR ACCEPTANCE OF STRUCTURAL STEEL AND TMT BAR
MANUFACTURERS

1. Steel manufacturers having valid BIS certificate and listed in the BIS website as on date of procurement of steel shall be allowed for supply of steel (Structural and TMT bars) and contractor shall procure from them with prior intimation to Engineer-in-charge.


2. Tests after receipt of structural steel at site :
In addition to availability of valid BIS license and MTC, testing at site shall be conducted by the contractor as per following requirement:

- For each category/size of structural steel procured, one sample for every 50 MT or part thereof shall be drawn and tested in approved laboratory
- The charges for such testing shall be borne by the contractor.

3. Tests after receipt of TMT bars at site:

In addition to availability of valid BIS license and MTC, testing at site in approved laboratory shall be conducted by the contractor as per the following requirement:

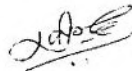
- Under 10 mm bars, one sample (diameter wise) for each 25 MT (or part thereof) for consignment below 100 MT and one sample (diameter wise) for each 40 MT for consignment above 100 MT shall be tested
- For 10 mm to 16 mm bars , one sample (diameter wise) for each 35 MT (or part thereof) for consignment below 100 MT and one sample (diameter wise) for each 45 MT (or part thereof) for consignment above 100 MT shall be tested.
- Over 16 mm bars one sample (diameter wise) for each 45 MT (or part thereof) for consignment below 100 MT and one sample (diameter wise) for each 50 MT (or part thereof) for consignment above 100 MT shall be tested.
- The charges for such testing shall be borne by the contractor


(S. K. Goud.)

Annexure - I

CONTRACT CLAUSE FOR ACCEPTANCE OF CEMENT MANUFACTURERS.

1. Cement manufacturers having valid BIS certificate and listed in the BIS website as on date of procurement of cement shall be allowed for supply of cement and contractor shall procure cement from them with prior intimation to Engineer-in-charge.
2. Tests after receipt of cement at site: Each batch of cement (week wise as mentioned on cement bags) supplied by the contractor after delivery at site shall be subjected to the tests and analysis required by the relevant Indian Standard Codes. The contractor shall carry out and bear the cost of all tests and analysis to ensure quality of cement before using in actual works.



 2/4/15

MISCELLANEOUS CIVIL & STRUCTURAL WORKS FOR
TRINITROTOLUENE (TNT) PLANT AT HIGH EXPLOSIVES
FACTORY (HEF) KHADKI OF MUNITIONS INDIA LIMITED (MIL),
PUNE, MAHARASHTRA

FORMAT FOR APPROVAL OF SUB-CONTRACTOR

[ANNEXURE – XIII TO SPECIAL CONDITIONS OF CONTRACT]

MISCELLANEOUS CIVIL & STRUCTURAL WORKS FOR TRINITROTOLUENE (TNT) PLANT AT HIGH EXPLOSIVES FACTORY (HEF) KHADKI OF MUNITIONS INDIA LIMITED (MIL), PUNE, MAHARASHTRA

ANNEXURE – XIII TO SCC**APPROVAL OF CONSTRUCTION SUB-CONTRACTOR**

1.	NAME OF MAIN CONTRACTOR	:	
2.	NAME OF WORK, LOCATION	:	
3.	NAME OF PROPOSED SUB-CONTRACTOR	:	
4.	SCOPE OF WORK PROPOSED TO BE SUB-CONTRACTED (BRIEF)	:	
5.	ESTIMATED VALUE OF THE PROPOSED WORK TO BE SUB-CONTRACTED (INR):	:	
6.	QUALIFYING CRITERIA FOR SUB-CONTRACTOR:	:	
6.1	Similar Work experience :	:	
i)	1 (One) Contract of 50% or 2 (two) contracts of 30 % each of estimated value of proposed work to be sub-contracted :	:	
ii)	Annual Turnover Not less than 100% of estimated value of proposed work to be sub-contracted; as per the audited annual financial results in at least one of the immediate preceding three financial years	:	
iii)	Networth shall be at least 10% of estimated value of proposed work to be sub-contracted as per the immediate preceding year's Audited financial results.as per latest annual balance sheet/ Profit & loss account:	:	
7.	EXPERIENCE AND FINANCIAL DETAILS OF PROPOSED SUB-CONTRACTOR	:	
i)	Contract Value of similar work executed (as evidenced by work Order & Completion Certificate) During the last 7 years	:	
ii)	Maximum Annual Turnover during last 3(three) years (as evidenced by Balance Sheets)	:	

MISCELLANEOUS CIVIL & STRUCTURAL WORKS FOR TRINITROTOLUENE (TNT) PLANT AT HIGH EXPLOSIVES FACTORY (HEF) KHADKI OF MUNITIONS INDIA LIMITED (MIL), PUNE, MAHARASHTRA

iii)	Networth as per latest annual balance sheet/ Profit & loss account	:	
8	CRITERIA FOR QUALIFICATION OF SUB-CONTRACTOR	:	
i)	Sl.No. 7(i) > 6 (i)	:	YES / NO
ii)	Sl.No. 7 (ii) > 6 (ii)	:	YES / NO
iii)	Sl.No. 7 (iii) > 6.1 (iii)	:	YES / NO
9	Based on above information, we M/s _____ (Name of Main Contractor) propose M/s. _____ (Name of proposed sub-contractor) as our sub-contractor for the above mentioned works. We understand that notwithstanding above approval, we shall remain fully responsible for the performance of the said sub-contractor and any failure of the sub-contractor shall not absolve/relieve us of our responsibility to complete the works as per the terms and conditions of the Contract.		

NOTE: Contractor to fill all the details in the above proforma. Further Contractor shall also fill-in the details at Sl.No.5 above based on the estimated value of the proposed work to be subcontracted.

(STAMP & SIGNATURE OF CONTRACTOR)

**EIL SPECIFICATIONS ON HEALTH, SAFETY AND
ENVIRONMENT (HSE) MANAGEMENT**

[ANNEXURE -XIV TO SPECIAL CONDITIONS OF CONTRACT]

Health, Safety and Environment (HSE) Management along with Safety Instructions and Procedures of MIL-HEF

[ANNEXURE - XIV TO SPECIAL CONDITIONS OF CONTRACT]

निर्माण स्थल पर स्वास्थ्य, सुरक्षा एवं
पर्यावरण प्रबंधन हेतु मानक विनिर्देश

STANDARD SPECIFICATION FOR
HEALTH, SAFETY & ENVIRONMENTAL
MANAGEMENT AT
CONSTRUCTION SITES

Rev. No.	Date	Purpose	Prepared by	Checked by	Standards Committee Convenor	Standards Bureau Chairman
2	18/04/2023	REVISED & UPDATED	BT	RK	JPV	SM
1	07/06/2022	REVISED & UPDATED	BT	RK	JPV	SM
0	23/12/2020	REVISED & UPDATED	BT	RK	AKK	S Mazumdar

Approved by

Abbreviations:

AERB	:	Atomic Energy Regulatory Board
ANSI	:	American National Standards Institute
BARC	:	Bhabha Atomic Research Centre
BS	:	British Standard
BOCW	:	Building and other construction workers
BOO/BOOT	:	Build, Own, Operate/Build, Own, Operate, Transfer
EIL	:	Engineers India Limited
EIC	:	Engineer In charge
ELCB	:	Earth Leakage Circuit Breaker
EPC	:	Engineering, Procurement and Construction
EPCC	:	Engineering, Procurement, Construction and Commissioning
ESI	:	Employee State Insurance
GCC	:	General Conditions of Contract
GM	:	General Manager
GTAW	:	Gas Tungsten Arc Welding
HOD	:	Head of Department
HSE	:	Health, Safety & Environment
HIRAC	:	Hazard, Identification Risk Assessment & Control
HMV	:	Heavy Motor Vehicle
HV	:	High Voltage
IS	:	Indian Standard
ISO	:	International Organization for Standardization
IE	:	Indian Electricity
LTI	:	Lost Time Injuries
LMV	:	Light Motor Vehicle
LOTO	:	Lock Out & Tag Out
LPG	:	Liquefied Petroleum Gas
LSTK	:	Lump Sum Turn Key
MV	:	Medium Voltage
OH&S	:	Occupational Health and Safety
OISD	:	Oil Industry Safety Directorate
PPE	:	Personal Protective Equipment
PUC	:	Pollution Under Control
RC	:	Registration Certificate
RCCB	:	Residual Current Circuit Breaker
RCM	:	Resident Construction Manager or Site-in-Charge, as applicable
SCC	:	Special Conditions of Contract
SLI	:	Safe Load Indicator
SWL	:	Safe Working Load
TPI	:	Third Party Inspection
TBT	:	Tool Box Talks

Construction Standards Committee

Convenor: Sh John Paul V, ED(Construction)

Members: Sh.Janak Kishore, ED (Projects)
Sh.Biswajit Mandal, CGM (SCM)
Sh. Udayan Chakravarty, Sr.GM (Piping)
Sh.Ravindra Kumar, Sr.GM (Construction)
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1.0 SCOPE

This specification establishes the Health, Safety and Environment (HSE) management requirement to be complied by Contractors/Vendors including their sub-contractors/sub vendors during construction.

This specification is not intended to replace the necessary professional judgment needed to design & implement an effective HSE system for construction activities and the contractor is expected to fulfill HSE requirements in this specification as a minimum. It is expected that contractor shall implement best HSE practices beyond whatever are mentioned in this specification.

Requirements stipulated in this specification shall supplement the requirements of HSE Management given in relevant Act(s)/ Legislations, General Conditions of Contract (GCC), Special Conditions of Contract (SCC) and Job (Technical) Specifications. Where different documents stipulate different requirements, the most stringent shall apply.

2.0 REFERENCES

The document should be read in conjunction with following:

- General Conditions of Contract (GCC)
- Special Conditions of Contract (SCC)
- Building and other construction workers Act, (Refer Appendix-D)
- Indian Factories Act,(Refer Appendix-D)
- Job (Technical) specifications
- Relevant International/ National Codes (refer Appendix-A for standards/codes on HSE)
- Relevant State & National Statutory requirements.
- Operating Manuals Recommendation of Manufacturer of various construction Machineries
- Occupation Health and Safety Management System (OHSAS 18001:2007/ISO 45001) and Environmental Management System (ISO 14001:2015)

3.0 REQUIREMENTS OF HEALTH, SAFETY & ENVIRONMENTAL (HSE) MANAGEMENT SYSTEM TO BE COMPLIED BY BIDDERS

3.1 Management Responsibility

3.1.1 HSE Policy & Objectives

The Contractor should have a documented and duly approved HSE policy & objectives to demonstrate commitment of their organization to ensure health, safety and environmental aspects in their line of operations.

The Contractor's senior management shall provide strong visible leadership and continuously demonstrate commitment to develop, operate and maintain, review and continually improve a HSE culture at site which empowers individuals to take responsibility for their safety and embrace and accept nothing but responsible HSE behaviour.

Contractor shall refer in clause No. 3.3.23 for Key Performance Indicator (KPI).

3.1.2 Management System

The HSE management system of the Contractor shall cover the HSE requirements & commitments to fulfill them, including but not limited to what have been specified under clauses 1.0 and 2.0 above. The Contractor shall obtain the approval of its site specific HSE Plan from EIL/ Owner prior to commencement of any site works. Corporate as well as Site management of the Contractor shall ensure compliance of their HSE Plan at work sites in its entirety in true spirit.

3.1.3 Indemnification

Contractor shall indemnify & hold harmless, Owner/EIL & their representatives, free from any and all liabilities arising out of non-fulfillment of HSE requirements or its consequences.

3.1.4 Deployment & Qualifications of Safety Personnel

The Contractor shall designate/deploy various categories of HSE personnel at site as indicated below insufficient number. In no case, deployment of safety Supervisor / Safety Steward shall substitute deployment of Safety Officer / Safety Engineer what is indicated in relevant statute of BOCW Act i.e. deployment of safety officer/Safety Engineer is compulsory at project site. The Safety supervisors, Safety stewards/Observer etc. would facilitate the HSE tasks at grass root level for construction sites and shall assist Safety Officer /Engineers.

Contractor shall appoint safety personnel as given below for every work shift:

- (i) Safety Observer/Steward: Contractor shall depute one Safety Observer/Steward for every 100 workers or part thereof
- (ii) Safety Supervisor: In addition to above(i), contractor shall depute one Safety Supervisor for every 250 workers or part thereof
- (iii) Safety Engineer: In addition to above (i&ii), one safety engineer/ officer for every 1000 workers or part thereof.

Contractor shall intimate/obtain prior permission from EIC before demobilizing any safety personnel. The Contractor shall mobilize suitable safety personnel as replacement.

a) Safety Steward/Observer

As a minimum, he shall possess class XII pass certificate and trained in fire-fighting as well as in safety/occupational health related subjects, with minimum two year of practical experience in construction work environment and should have adequate knowledge of the local language spoken by majority of the workers at the construction site.

b) Safety Supervisor

As a minimum, he shall possess a recognized graduation Degree in Science (with Physics & Chemistry) or a Diploma in Engg. Or Tech. with minimum Two years of practical experience in construction work environment and should possess requisite skills to deal with construction safety & fire related day-to-day issues.

c) Safety Officer / Safety Engineer

Safety Officer/Engineer should possess following qualification & experience:

- (i) Recognized degree in any branch of Engg. or Tech. or Architecture with practical experience of working in a building or other construction work in supervisory capacity for a period of not less than two years, **or** possessing recognized diploma in any branch of Engg. or Tech with practical experience of working in a building or other construction work in supervisory capacity for a period of not less than five years.
- (ii) Recognized degree or one year diploma in Industrial safety (from any Indian Institutes recognized by AICTE or State Council of Tech. Education of any Indian State/Union territory) with at least one paper in construction safety (as an elective subject).
- (iii) Preferably have adequate knowledge of the language spoken by majority of the workers at the construction site.

Alternately

- (i) Person possessing Graduation Degree in Science with Physics **or** Chemistry and degree or one year diploma in Industrial Safety (from any Indian institutes recognized by AICTE or State Council of Tech. Education of any Indian State/ Union Territory) with practical experience of working in a building, plant or other construction works (as Safety Officer, in line with Indian Factories Act, 1948) for a period of not less than five years, may be considered as Safety Officer.

d) HSE In-Charge

In case there is more than one Safety Officer at any project construction site, one of them, who is senior most by experience (in HSE discipline), may be designated as HSE In-Charge. Duties & responsibilities of such person shall be commensurate with that of relevant statute and primarily to coordinate with top management of EIL/Client and contractors.

In case the statutory requirements i.e. State or Central Acts and / or Rules as applicable like the Building and Other Construction Workers' Regulation of Employment and Conditions of Service- Act, 1996 or State Rules (wherever notified), the Factories Act, 1948 or Rules (wherever notified), etc. are more stringent than above clarifications, the same shall be followed.

Contractors shall ensure physical availability of safety personnel at the place of specific work location, where Hot Work Permit is required/granted. No work shall be started at any of the project sites until above safety personnel & concerned Site Engineer of Contractor are physically deployed at site. The Contractor shall submit a HSE Organogram clearly indicating the lines of responsibility and reporting system and elaborate the responsibilities of safety personnel in their HSE Plan.

Upon fulfilling the basic requirement of qualification and relevant experiences, the performance of contractor HSE personnel's is to be monitored.

The good performing contractor's HSE personnel at site shall be rewarded upon assessment of performance by EIL/Owner. The non-performing HSE personnel shall be counselled by EIL/Owner & suitable action may be taken for suspension from site for 3-6 days. Contractor shall arrange training for non performing HSE personnel.

HSE In-Charge of the contractor shall be given the status at par with the other heads of department and shall report to Head of Project.

The Contractor shall verify & authenticate credentials of such safety personnel and furnish Bio-Data/Resume/Curriculum Vitae of the safety personnel as above for EIL/Owner's approval, at least 1 month before the mobilization. The Contractor, whenever required, shall arrange submission of original testimonials/certificates of their Safety personnel, to EIL/Owner (for verification/scrutiny, etc.)

Imposition/ Realization of penalty shall not absolve the Contractor from his/her responsibility of deploying competent safety officer at site.

Adequate planning and deployment of safety personnel shall be ensured by the Contractor so that field activities do not get affected because of non-deployment of competent & qualified safety personnel in appropriate numbers.

3.1.5 Implementation, Inspection/Monitoring

- a) The Contractor shall be fully responsible for planning, reporting, implementing and monitoring all HSE requirements and compliance of all laws & statutory requirements.
- b) The Contractor shall also ensure that the HSE requirements are clearly understood & implemented conscientiously by their site personnel at all levels at site.
- c) The Contractor shall ensure physical presence of their field engineers / supervisors, during the continuation of their contract works / site activities including all material transportation activities. Physical absence of experienced field engineers / supervisors of Contractor at critical work spot during the course of work may invite halting / stoppage of work.
- d) The Contractor shall regularly review inspection report internally and implement all practical steps / actions for improving the status continuously.
- e) Contractor skilled workmen like riggers, scaffold erectors, welders, crane operators etc. should have sufficient past experience and skill on the relevant job.
- f) The Contractor shall ensure important safety checks right from beginning of works at every work site locations and to this effect format No. HSE-10 "Daily Safety Check List" shall be prepared by field engineer & duly checked by safety personnel for conformance.
- g) The Contractor shall carry out inspection to identify various unsafe conditions of work sites/machinery/equipment's as well as unsafe acts on the part of workmen/supervisor/engineer while carrying out different project related works.
- h) Adequate records for all inspections shall be maintained by the Contractor and the same shall be furnished to EIL/Owner, whenever sought.
- i) To demonstrate involvement/commitment of site management of Contractor, at least one Monthly Safety Walk through in a month shall be carried out by Contractor's head of site (along with his area manager/field engineers) and a report shall be furnished to EIL/Owner as per format No: HSE-1" Safety walk through report" followed by compliance for unsatisfactory remarks.
- j) As a general practice lifting tools/tackles, machinery, accessories etc. shall be inspected, tested and examined by competent person (approved by concerned State authorities) before being used at site and also at periodical interval (e.g. during replacement, extension, modification, elongation/reduction of machine/parts, etc.) as per relevant statutes. Hydraulic Mobile Crane, cranes, lifting machinery, mobile equipment's/ machinery/ vehicles, etc. shall be inspected regularly by only competent / experienced personnel at site and requisite records for such inspections shall be maintained by contractor. Contractor shall also maintain records of maintenance of all other site machinery (e.g. generators, rectifiers, compressors, cutters, etc.) & portable tools/equipment's being used at project related works (e.g. drills, abrasive wheels, punches, chisels, spanners, etc.). The Contractor shall not make use of arbitrarily fabricated 'derricks' at project site for lifting/ lowering of construction materials.
- k) Site facilities /temporary. installations, e.g. batching plant, cement godown, DG-room, temporary electrical panels/distribution boards, shot-blasting booth, fabrication yards, etc. and site welfare facilities, like labour colonies, canteen/pantry, rest-shelters, motor cycle/bicycle-shed, First-aid centers, urinals/toilets, etc. should be periodically inspected by Contractor (preferably utilizing HR/Admin. personnel to inspect site welfare facilities) and records to be maintained.

3.1.6 Behaviour Based Safety

- a) The contractor shall develop a system to implement Behavior-Based Safety (BBS) through which work groups can identify, measure and change the behaviors of employees and workers towards construction safety aspects.
- b) The BBS process shall include the following:
 - Identify the behaviors critical to achieve required safety performance.
 - Communicate the behaviors and how they are performed correctly by all
 - Observe the work force and record safe/at risk behaviors. Intervene with workers to give positive reinforcement when unsafe behaviors are observed. Provide coaching/correction when at risk behaviors are observed
 - Collect and record observation data
 - Summarize and analyze observation data
 - Communicate observation data and analysis results to all employees
 - Provide recognition or celebrate when safe behavior improvements occur
 - Change behaviors to be observed or change activators or change consequences as appropriate.
 - Communicate any changes to workforce
- c) Contractor through its own HSE committee shall implement the above process.
- d) The necessary procedures and Monthly reporting formats shall be developed by the contractor for approval by EIL/Owner.
- e) The HSE committee of contractor shall observe individual's behavior for safe practices adapted for utilization/execution of work for followings a minimum:-
 - PPE
 - Tools & equipment's
 - Hazard Identification & control
 - House keeping
 - Confined space entry
 - Hot works
 - Excavation
 - Loading & unloading
 - Work at height
 - Stacking & storage
 - Ergonomics
- f) EIL/Owner and Contractor's site staff at all levels shall monitor the behavior of contractor employees that create and/or contribute to the unsafe situations at work place.
- g) Contractor shall arrange Behavior Based safety (BBS) training of their employees at site on yearly basis.

3.1.7 Awareness and Motivation

- a) The Contractor shall promote and develop awareness on Health, Safety and Environmental protection among all personnel working for the Contractor.
- b) The contractor shall display safety statistics board at all prominent location. Also shall provide dedicated notice board for displaying of safety alerts or any other safety related notices for awareness site workforces.
- c) Regular awareness programs and fabrication shop/work site meetings at least on monthly basis shall be arranged on HSE activities to cover hazards/risks involved in various operations during construction.
- d) Contractor's workmen & supervisory staff shall participate in common Tool Box Meeting as & when organized/required at site to avoid any incident/accident or occupational disease arising out of multidisciplinary jobs/activities being performed by various contracting agencies in the same location at different elevation.

- e) Contractor to motivate & encourage the workmen & supervisory staff by issuing/ awarding them with tokens/ gifts/ mementos/ monetary incentives/ certificates etc. The motivational program shall be organized on regular basis.
- f) Contractor shall assess & recognize the behavioral change of its site engineers / supervisors periodically and constantly motivate / encourage them to implement HSE practices at project works
- g) Life Saving Rules (refer Appendix-I for details) are to be displayed at prominent location of site.

3.1.8 Fire Prevention & First-Aid

The Contractor shall deploy First aider & suitable First-aid measures such as First Aid Box (Refer Appendix-B for details), stand-by Emergency Vehicle. Additionally separate ambulance with trained personnel/male or female nurse to administer First Aid shall be provided by the Contractor beyond deployment of 500 workmen during day/night working hours.

- a) The Contractor shall arrange installation of fire protection measures such as adequate number of steel buckets with sand & water and adequate number of appropriate portable fire extinguishers (Refer Appendix-C for details) to the satisfaction of EIL/Owner.
- b) The Contractor shall arrange EMERGENCY MOCK DRILL like fire, bomb threat, gas leakage, earth quake, etc. at each site at least once in three months, involving site workmen and site supervisory personnel & engineers. The Contractor shall maintain record of such mock drills at project site.
- c) The contractor shall require to tie-up with the hospitals located in the neighborhood for attending medical emergency.

3.1.9 Documentation

The Contractor shall evolve a comprehensive, planned and documented system covering the following as a minimum for implementation and monitoring of the HSE requirements and the same shall be submitted for approval by owner/EIL.

- HSE Organogram
- Site specific HSE Plan
- Safety Procedures, forms and Checklist. Indicative list of HSE procedures is attached as Appendix :H
- Inspections and Test Plan
- Risk Assessment & HIRAC for critical works.
- HIRAC Register as per Format no: HSE-19 to identify, assess, analyze & mitigate the construction hazards& incorporate relevant control measures before actually executing site works.
- Environmental Aspect Impact Register as per Format no: HSE-18 (identify, assess, analyze & mitigate the environmental impact & incorporate relevant control measures).
- Legal Register to identify and comply to all applicable HSE related legal requirements.

The monitoring for implementation shall be done by regular inspections and compliance of the observations thereof. The Contractor shall get similar HSE requirements implemented at his sub-contractor(s) work site/office, if applicable. However, compliance of HSE requirements shall be the responsibility of the Contractor. Any review/approval by EIL/Owner shall not absolve contractor of his responsibility/liability in relation to fulfilling all HSE requirements.

3.1.10 Audit

Safety Audit shall be conducted at initial stage by EIL/Owner to understand the readiness to start the job after mobilization of contractor's RCM at site& Suitable action shall be taken by contractor to comply the audit observation(s).

The Contractor shall submit an Audit Plan to EIL/Owner indicating the type of audits covering following as minimum:

- a) Internal HSE audits regularly on six monthly basis by engaging internal qualified auditors (viz. safety officers/Construction personnel having 5years experience in construction safety and Lead Auditor Course: OHSAS 18001/ISO 45001 certification).However, minimum two internal HSE audit will have to be conducted irrespective of time period of the contract.
- b) External HSE audits regularly on yearly basis by engaging authorized auditing agencies (viz. National Safety Council etc.)or qualified external auditors (viz safety officers/Construction personnel having 10years experience in construction safety and Lead Auditor Course: OHSAS 18001/ISO 45001certification). However, minimum one external HSE audit will have to be conducted irrespective of time period of the contract.
- c) EIL/Owner may participate in Opening and closing meeting of external audits and provide inputs to the external auditor. Outcome of external audit shall be discussed during HSE Meeting with EIL/Owner.

All HSE shortfalls/ non-conformances on HSE matters brought out during review/audit, shall be resolved forthwith(generally within a week) by Contractor& compliance report shall be submitted to EIL/Owner.

In addition to above audits by contractor, the contractor's work shall be subjected to HSE audit by EIL/Owner at any point of time during the pendency of contract. The Contractor shall take all actions required to comply with the findings of the Audit Report and issue regular Compliance Reports for the same to OWNER/ EIL till all the findings of the Audit Report are fully complied.

Failure to carry-out HSE Audits& its compliance (internal & external) by Contractor, shall invite penalization.

3.1.11 Meetings

- i. The Contractor shall ensure participation of his top most executive at site (viz. Resident Construction Manager / Resident Engineer/ Project Manager / Site-in-Charge) along with safety officer in Safety Committee/HSE Committee meetings arranged by EIL/Owner usually on monthly basis or as and when called for. In case Contractor's top most executive at site is not in a position to attend such meeting, he shall inform EIL/Owner in writing before the commencement of such meeting indicating reasons of his absence and nominate his representative – failure to do so may invite very stringent penalization against the specific Contractor, as deemed fit as per Contract. The obligation of compliance of any observations during the meeting shall be always time bound. The Contractor shall always assist EIL/Owner to achieve the targets set by them on HSE management during the project implementation.
- ii. In addition, the Contractor shall also arrange internal HSE meetings chaired by his top most executive at site on fortnightly basis and maintain records. Such internal HSE meetings shall essentially be attended by field engineers / supervisors including safety personnel of the Contractor and its associates. Records of such internal HSE meetings shall be maintained by the Contractor for review by EIL/Owner or for any HSE Audits.
- iii. Agenda of internal HSE meeting should broadly cover: -
 - a) Confirmation of record notes /minutes of previous meeting
 - b) Discussion on outstanding subjects of previous points / subjects, if any
 - c) Incidents / Accidents (of all types) at project site, if any
 - d) Current topics related to site activities / subjects of discussion
 - e) House keeping
 - f) Behavioral Safety
 - g) Information / views / deliberations of members / site sub-contractors
 - h) Report from Owner / Client
 - i) Status of Safety awareness, Induction programs & Training programsThe time frame for such HSE meeting shall be religiously maintained by one and all.