

**NATIONAL INSTITUTE OF ANIMAL
BIOTECHNOLOGY (NIAB), HYDERABAD**

TENDER

FOR

**Construction of Stone Masonry Compound Wall for NIAB
Campus at Survey No.37, Serlingampally, Hyderabad**

VOLUME – III

**Specific Conditions of Contract
(SCC)**

January' 2013



**HSCC (INDIA) LTD.
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SPECIFIC CONDITIONS OF CONTRACT (SCC)

1. Definitions and Interpretation

In construing these conditions, the specifications, Bill of Quantities and Contract agreement etc the following words and expression shall have the meaning herein assigned to them except where the subject and context otherwise require.

- (a) “Act of Insolvency” shall mean any Act of Insolvency as defined by the Presidency Towns Insolvency Act or Provincial Insolvency Act or any Act amending such original.
- (b) “Approved” means approved in writing, including subsequent written information of previous verbal approval and “approval” means approval in writing, including as aforesaid.
- (c) “As directed” means the direction given by the Engineer In-Charge/Client/Consultant.
- (d) “Bill of Quantities” or “Schedule of items” means the schedule and quantities of items, materials and rates, summaries etc. priced and completed and as finally accepted.
- (e) “Constructional Plant” means all appliances or things of whatsoever nature required in or about the execution or maintenance of the Works but does not include materials or other things intended to form or forming part of the Works.
- (f) “Consultant” shall mean consultant appointed by the Client for implementing the “**Construction of Stone Masonry Compound Wall for NIAB Campus at Survey No.37, Serlingampally, Hyderabad**” HSCC (India) Ltd., having its corporate office at E-6(A), Sector 1, Noida UP-201301 has been appointed as Consultant for this project. The Consultant shall also have its office at the site. The word “Consultant” is synonymous with “Project Consultant”.
- (g) “Day” means a calendar day of 24 hours (beginning and ending at 00 hrs and 24 hrs respectively) irrespective of number of hours worked or not worked in that day.
- (h) “**Drawings**” means the drawings prepared and issued by the Consultant and referred to in the tender and specifications and any modification of such drawings and such other drawings, calculations and technical

information of a like nature as may, from time to time, be issued by the Consultant.

- (i) "I. S." means latest revision of 'Indian Standards Specification' issued by Bureau of Indian Standards.
- (j) "Constructional Plant" means all appliances or things of whatsoever nature required in or about the execution or maintenance of the Works but does not include materials or other things intended to form or forming part of the Works.
- (k) "Materials" means the materials, apparatus, equipment, fittings, fixtures and all such other materials, which are incorporated in the work.
- (l) "Month" means calendar month without regard to the number of days worked or not worked in that month.
- (m) "Net Prices": If in arriving at the contract amount or contract sum, the Contractor shall have added or deducted from the total amount of the items in the Tender any sum, either as a percentage or otherwise, then the net price of any item in the tender shall be the sum arrived at by adding to or deducting from the actual figure appearing in the Tender as the price of that item and similar percentage or proportionate sum provided always that in determining the percentage or proportion of the sum so added or deducted by the Contractor, the total amount of any Prime cost items and provisional sums of money shall be deducted from the total amount of the tender. The expression "net rates" or "net prices" when used with reference to the contract or accounts shall be held to mean rates or prices so arrived at.
- (n) "Notice in writing" or "written notice" shall mean notice in written, typed or printed characters, sent (unless delivered personally or otherwise proved to have been received) by registered post to the site office/ last known private or business address or registered office of the addressee and shall be deemed to have been received when in the ordinary course of post it would have been delivered.
- (o) "Permanent Works" means the permanent works to be executed (including Plant) in accordance with the Contract.
- (p) Deleted
- (q) "Specifications" means the specification included and / or referred to in the Tender document and any modification thereof or addition thereto as may from time to time be issued to the Contractor.

- (r) "Temporary Works" means all temporary works of every kind required in or about the execution and completion or maintenance of the Works and the remedying of any defects therein.
- (s) "**Urgent Works**" means any urgent works which in the opinion of the Client and/or Consultant becomes necessary at the time of execution and/or during the progress of work to obviate any risk of accident or failure or to obviate any risk of damage to the structure of services or required to accelerate the progress of the work for which becomes necessary for safety and security or for any other reason the Client and/or Consultant may find it necessary.
- (t) "Week" means seven calendar days without regard to the number of hours worked or not worked in any day in that week.
- (u) Words imparting the signal only also include the plural and vice versa where the context requires.
- (v) The "**Engineer-in-charge**" or "**Engineer**" "**Engineer in Charge**" (**EIC**) means the General Manager (Projects), HSCC (India) Ltd. or any officer nominated by Chairman-cum-Managing Director, HSCC (India) Ltd. to act as Engineer-in-Charge from time to time who shall supervise and be in charge of the work.
- (w) **Client** shall mean **National Institute of Animal Biotechnology (NIAB), Hyderabad** represented by a Designated Officer as defined in Volume – II General Conditions of Contract of the tender documents.
- (x) "**PRINCIPAL EMPLOYER**" OR "**EMPLOYER**" means **National Institute of Animal Biotechnology (NIAB), Hyderabad**.

The headings, subheadings and marginal notes (if any) and the catch lines and the Annexure hereto are meant only for convenience of reference and shall not be in any way be taken into account in the interpretation of these presents and the Annexure hereto. The Contractor shall have to carry out and complete the works in every respect in accordance with this contract.

2. Languages & Law

The ruling language in which the Contract and related aspects shall be drawn up shall be English only. Law means- law as applicable to site of work.

3. **Errors, Omissions and Discrepancies.**

- (a) In case of errors, omissions and /or disagreement between written and scaled dimensions on the drawings or between the drawings and specifications, etc. the following order of precedence shall apply:
- i. Between scaled and written dimension (or description) on drawing, written dimension shall be adopted.
 - ii. Between the written or shown description or dimensions in the drawings and the corresponding one in the specification, the former shall be taken as correct.
 - iii. Between the written description of the item in the specifications and descriptions in the Bill of Quantities of the same item, the latter shall be adopted.
- (b) Deleted
- (c) Between the duplicate/subsequent copies of the tender and original tender, the original tender shall be taken as correct.
- (d) The several documents forming the Contract are to be taken as mutually explanatory of one another, but in case of ambiguity or discrepancies in conditions or specifications the same shall be explained and adjusted by Engineer-in-charge. In case the Contractor does not agree with the explanation given by the Engineer-in-charge, then the matter, on his written notice, will be referred to the Client and his decision shall be final and binding to the contractor.
- (e) In all cases of omissions and /or doubts or discrepancies in any of the items or specifications, a reference shall be made to the Engineer-in-Charge. Elucidation, elaboration or decision of the Engineer-in-charge shall be considered as authentic. The Contractor shall be held responsible for any error that may occur in the work through lack of such reference and precaution.

4. **Scope of Contract**

Construction of Stone Masonry Compound Wall for NIAB Campus at Survey No.37, Serlingampally, Hyderabad.

The Scope of work comprises of “**Construction of Stone Masonry Compound Wall for NIAB Campus at Survey No.37, Serlingampally, Hyderabad**”. The scope of work shall also include liaison with Local Authorities if any required.

The contract comprises the construction, completion, remedying the defect of the works and except in so far as the Contract otherwise stipulates, the provision of all labour, materials, constructional plant, machinery temporary works and everything, whether of a temporary or permanent nature required in and for such construction, completion and maintenance so far as necessary for providing the same as specified in or reasonably to be inferred from the Contract.

The Contractor will provide one temporary site office with electricity and water supply and one vehicle (indica or equivalent) with driver and fuel for the entire project period for use by the Consultant. The cost of these items shall be deemed to be included in the cost quoted by the Contractor. The temporary site office shall be built as per the directions and approval of Engineer. The temporary site office shall be demolished and all debris removed before issue of final completion certificate.

5. Drawings

(a) Tender Drawings

The tender drawings are for Tender Purpose only and are intended as a guide to the Bidder / Contractor and give general layout of buildings and general information of the structures and general positions of utilities, services and equipments only. Contractor's quoted rate for any item should not be based on any measurement, quantity, and specification from these drawings. Any claim raised by the contractor in this regard shall not be valid in this contract and shall not be accepted by the Consultant.

(b) Issue and custody of drawings & specifications

The contractor on the signing of contract shall be furnished free of cost three copies of all drawings and all further drawings issued during the progress of the works. The contractor shall keep one copy of all drawings at the works site and the Client/Engineer-in-charge/Consultant shall have, at all reasonable times, access to the same.

The drawings shall be provided to the Contractor as per the schedule (prepared at the starting of the works and necessarily updated or revised time to time) mutually agreed by the Engineer-in-charge and the Contractor. Last major drawings may be provided as per the schedule prior to the stipulated date of completion and the Contractor, if found necessary shall increase his resources and effort so as to complete the works within stipulated time

From time to time during the course of contract revised drawings may be issued to the Contractor and the Contractor shall ensure that all superseded drawings are removed from site and stored in a lockable cabinet as directed by the Engineer-in-charge and replaced by revised drawings.

The Contractor shall maintain complete up to date Register of drawings to be maintained at site. All drawings shall be properly filed and indexed for ready reference.

The contractor shall ensure that only the valid up to date drawings are used for setting out, construction and preparation of working drawings etc.

Detail drawings in all cases shall be worked to in preference to those of a more general nature and figured dimensions were indicated shall be followed in preference to scaled dimensions.

(c) Bar Bending Schedule

Contractor shall prepare bar bending schedules in the prescribed proforma as approved by the Engineer-in-charge for prior approval of the Engineer-in-charge or his authorized representative. However, the approval does not relieve the Contractor from his liability for bending, placing and binding reinforcements as per the approved drawings.

(d) Working drawings/ shop drawings/Design :

The drawings supplied by the Engineer-in-charge have been listed in the tender documents.

These drawings are indicating for the purpose of detailing the intent and requirement of the contracts. The contractor shall take into consideration by space allocated for equipments before ordering them to ensure that the equipment would fit in the space provided with necessary clearances required as per the relevant standard/ manufactures recommendations.

Structural and architectural drawings will be provided by the Consultant. However, to ensure the uninterrupted progress of work and timely completion, the contractor may be required to do further detailing as per site requirement at his own.

All drawings shall be signed by Contractor's authorised representative with name, seal and date before submission to Engineer-in-charge.

(e) "AS MADE" Drawings

The Contractor shall supply two complete sets of "As Made" Drawings on polyester tracing film 75 micron thick and also on computer pen drive and three prints showing details of all the Works as executed. The drawings and prints shall be delivered to the Engineer within one month of completion of the various Sections of the work or at such other times as directed by the Engineer. The drawings shall be fully dimensioned with the Engineer's standard title block or as approved by the Engineer. The cost of making the "As Made" drawings shall be deemed to be included in the rates quoted in the Bill of Quantities.

6. Disruption of Progress

- (a) The Contractor shall give adequate but not less than 4 weeks written notice to the Engineer-in-charge whenever planning or progress of the Works is likely to be delayed or disrupted unless any further drawing or order, including a direction, instruction or approval, is required to be issued by the Consultant. The notice shall include details of the drawing or order required explaining why and by when it is required and of any delay or disruption likely to be suffered if it is late.
- (b) If by reason of any failure or inability of the Consultant to issue within 4 weeks any drawing or instruction for which notice has been given by the Contractor in accordance with Sub-clause 1) and the contractor suffers delay, then the Engineer-in-charge, shall on the request of the Contractor recommend to the Consultant any extension of time under respective clause. Notwithstanding anything stated above, the Contractor shall not be eligible for any financial compensation arising out of the above.

7. Further Drawings and Instructions

The Contractor shall carry out and complete the said work in every respect in accordance with this Contract and with the directions of and to the satisfaction of the Consultant. The Consultant may in his absolute discretion and from time to time further issue drawings and/or written instructions, details, directions and explanations, which are hereafter collectively referred to as "Consultant's Instructions" in regard to:

- (a) The variation or modification of the design, quality or quantity of items of works or the addition or omissions or substitution of any item.
- (b) Any discrepancy in the drawings or between the bill of quantities and/or drawings and/or specification.
- (c) The removal from the site of any material brought thereon by the contractor and the substitution of any other material therefore.

- (d) The removal and/or re-execution of any works executed by the contractor.
- (e) The dismissal from the works of any persons employed thereupon.
- (f) The opening up for inspection of any work covered up.
- (g) The amending and making good of any defects under clause thereof.

The contractor shall forthwith comply with and duly execute any work comprised such as Consultant's instructions provided always that verbal instructions, directions and explanations given to the contractor or his representative upon the works by the Consultant, shall, if involving a variation, be confirmed in writing by the Contractor within seven days, and if not dissented from in writing within a further seven days by the Consultant, such shall be deemed to be Consultant's instructions within the scope of the contract

8. Deleted

9. Contractor's General Responsibilities

(a) Execution of works:

The Contractor shall, subject to the provisions of the Contract, and with due care and diligence, execute and complete the Works & remedy any defects therein in accordance with the Contract. The Contractor shall provide all labour, including the supervision thereof, materials, Constructional Plant and Machineries and all other things, whether of a temporary or permanent nature, required in and for such execution, completion, maintenance and remedying of any defects, so far as the necessity for providing the same is specified in or is reasonably to be inferred from the Contract.

If the contractor finds any discrepancy in the drawings or between the drawings, bill of quantities and specifications, he shall immediately and in writing refer the same to the Consultant who shall decide which is to be followed

The successful contractor is bound to carry out any items of work necessary for the completion of the job even though such items are not included in the bill of quantities and rates instructions in respect of such additional items and their quantities will be issued in writing by the Consultant.

The Contractor must bear in mind that all the work shall be carried out strictly in accordance with the specifications as given in these documents and also in compliance of the requirements of the local public authorities

and to the requirements / satisfaction / direction of the Consultant/Engineer-in-charge and no deviation of any account will be permitted.

The contractor shall have to use materials from the makes / manufacturers specified in the list of materials of approved brand and/or manufacture contained in the contract documents and as approved by the Consultant. Wherever different pattern/ Design/ Quality of materials with same specification/ make as specified in the contract, is available in the market, Consultant/Engineer-in-Charge will approve the pattern/ Design/ Quality of the material/ item which shall be final and binding on the contractor.

The Consultant is empowered to cancel an approval of material if subsequently it is found that approved material once brought at site and tested does not meet the requirement as specified in the contract. In such case the Consultant will accord approval of alternate material.

(b) Adequacy, stability and safety:

The Contractor shall take full responsibility for the adequacy, stability and safety of all site operations and methods of construction.

(c) Temporary works and arrangements:

The Contractor shall furnish to the Consultant full particulars, drawings, etc. of all temporary works necessary for the execution of the works and shall allow sufficient time for the Consultant to consider the same. The Consultant reserves the right to comment on the Contractor's proposals if they consider that modifications should be made. The Contractor shall be solely responsible for the stability and safety of all temporary works including obtaining statutory approvals and payment of statutory fees, if any. The Consultant will indicate the site(s) for such temporary works and the Contractor will have to restrict his requirements to the same. Should it be necessary to shift the temporary works to some other allotted place during the execution of the works, the Contractor shall do so, when informed by the Consultant, at his own cost and without delay or demur. Such shifting of temporary works may be in part or in full.

(d) Initial and Final Clearance of site for temporary works:

The Contractor shall be responsible for the clearance of the site of all scrub, debris, rubbish, etc. to be removed off site to a location to be provided by the contractor and approved by the Engineer-in-charge. However, no trees shall be removed without the prior permission of the Engineer-in-charge. The structures, services and works required to be demolished and removed shall also be removed off site to a location as

mentioned above. The Contractor shall obtain necessary permissions and approvals from the local authorities for such disposals. The demolition shall include digging, excavating and removal of substructures, foundations and buried works. The cost of all this shall be borne by the Contractor.

The above is applicable for all site offices, labour camps, and godowns etc., which are not required after the works is fully completed.

(e) Storage, Cleaning and Dewatering

The Contractor shall at all the times during construction keep the Site clean and free from all debris and unwanted materials on a daily basis as per instructions of the Engineer-in-charge.

Storage of materials shall be in an organized manner and in proper compartments as directed by Consultant. Storage on suspended floors shall not be permitted unless specifically approved in writing by the Consultant for specific materials in specific locations and in approved manner. The Consultant shall be furnished with load details, if requested, before seeking approval for storage.

Regular cleaning operations shall be undertaken to remove all dust, debris, waste materials etc. A cleaning schedule shall be maintained.

Contractor shall make his own arrangement for storage of those materials, which can be accommodated at site. Contractor shall be fully responsible for safe custody of the same. Materials shall be considered as "Delivered at Site" only after the physical presence of materials at site are verified by the Consultant. Stores elsewhere shall not be eligible for being considered as "Delivered at Site."

Contractor shall be responsible to keep entire site free from water due to water coming from any source at any level and shall protect all materials and works from being damaged by the water from any source. Contractor shall make proper arrangements for drainage prior to use of water for curing, testing, cleaning etc.

Any expenditure incurred by the Contractor in fulfillment of his obligations under this sub-clause shall be deemed to have been included in the Contract Sum.

10. Watching & Lighting

The Contractor shall throughout the execution and completion of the Works and the remedying of the site and the Works and the remedying of any defects therein have full regard for the safety of all persons entitled to be on the site and keep the site and the Works in an orderly state appropriate to the avoidance of danger to such persons and in connection with the Works provide and maintain at his own cost all lights, guards, fencing and watching when and where necessary or required by the Consultant, or by any duly constituted authority, for the execution and for the protection of the Work, and/or for the safety and convenience of the public or others and take all reasonable steps to protect the environment on and off the site and to avoid damage or nuisance to person or property of the public or others resulting from pollution, noise and other causes as a consequence of his methods of operation.

11. Care of Works

From the commencement to the certified completion of the whole of works, the contractor shall take full responsibility for the care thereof and of all temporary works and in case any damage loss or injury shall happen to the works or to any part thereof or to any temporary works from any cause whatsoever save and except the expected risks as defined in sub-clauses of Clause 12.

The contractor shall at his own cost repair and make good the same so that on completion, the works shall be in good order and condition and conformity to every respect with the requirements of the contract and Engineer-in-charge's instructions. The contractor shall also be liable for any damage to the works occasioned by him including his subcontractors in the course of any operations carried out by him for the purpose of completing any outstanding work and complying with his obligations under clause 33 hereof. The contractor shall indemnify the Employer from all risks on this account.

12. Expected Risks & Force Majeure

(a) Expected Risks

The "expected risks" are war, hostilities (whether war declared or not), invasion, act of foreign enemies, rebellion, revolution, insurrection or military or usurped power, civil war, or (unless solely restricted to the Contractor or of his sub-Contractors and arising from the conduct of, their workmen) riot, commotion or disorder or radiation or contamination by radio-activity and other hazardous properties of any explosive, nuclear fuel or from any nuclear waste from the combustion of nuclear fuel, radio active toxic explosive, nuclear assembly or nuclear component thereof, pressure waves caused by aircraft or other aerial devices traveling at sonic or supersonic speeds, or any such operation of the forces of nature as an experienced contractor could not foresee, or reasonably make

provision for on insure against all of which are herein collectively referred to as “the expected risk”

(b) **Force Majeure**

- i) Any failure or delay in the performance by either party hereto of its obligations under his Contract shall not constitute a breach thereof or give rise to any claims for damages if, and to the extent that it is caused by occurrences beyond the control of the party affected, namely, acts of God, floods, explosions, wars, riots, storms, earthquakes, insurrection, epidemic or other natural disasters. The party so affected shall continue to take all actions reasonably within its power to comply as far as possible with its obligations under this Contract. The affected party shall promptly notify the other party after the occurrence of the relevant event and shall use every reasonable effort to minimize the effects of such event and act in all good faith with due care and diligence.
- ii) In the event of the effect of force majeure continuing beyond the period of One hundred and eighty (180) days, the parties shall mutually decide whether or not to terminate this Contract. In the event of termination of contract, the contractor shall be paid for the work done and which has been accepted and certified by the Consultant and shall not assert any additional claims against the Client.

13. Contractor’s Superintendence

- (a) The contractor shall be solely responsible for the means, methods, techniques sequence and procedure of construction. The Contractor shall be responsible to see the completed work complies accurately with the Contract Document.

The Contractor shall give or provide all necessary superintendence during the execution of the Works.

(b) **Contractor’s Senior Representative for Execution & Coordination of Works**

The Contractor shall have on site all times during working hours throughout the course of the Contract or at least one Competent senior representative who shall be empowered to make decisions binding on the Contractor in respect of all matters likely to arise in connection with the execution & coordination of the works at the site and shall keep the Engineer-in-charge/Consultant informed at all times about the name and designation of such representative. Contractor’s Senior Representative shall have the power to take joint measurement and sign the

measurement books / bills. Any direction, explanations, instructions or notices given by the Consultant/Engineer-in-charge to such representative shall be held to be given to the Contractor. In case of absence of Senior Representative from the site, other alternative representative must be available at site with same powers.

A list of all technical and key personal staffs must be submitted to the Consultant with their area of work / responsibility with verified signature and the link persons to receive the instruction at site (in case the main person was not found at site) during the inspection by representative of Client and/or Consultant and/or Engineer-in-charge. Any staff of contractor found with insufficient suitable capability to execute the assigned work for the project must be replaced by the Contractor.

(c) Contractor's Employees

The Contractor shall provide and employ, after approval from the Consultant/Engineer-in-charge on the site in connection with the execution, completion of works and remedying any defects therein all Engineering staff / technical assistants are qualified, skilled and experienced in their respective trades, foremen and leading hands as are component to give proper supervision, ensuring quality & output to the work they are required to supervise, and also such skilled, semi-skilled and unskilled labour as are necessary for the proper and timely execution, completion of work and remedying and defects in the works. No child labour shall be employed on the work. All the skilled semi-skilled and unskilled labour shall work under the sole guidance of the contractor's senior representative.

(d) Removal of Contractor's Employees

The Contractor shall on the direction of the Consultant/Engineer-in-Charge immediately dismiss from the works any person employed thereon by him who may, in the opinion of the Consultant/ Engineer-in-Charge be incompetent or misconduct himself and such person shall not be again employed on the works without the permission of the Engineer-in-charge/Consultant.

(e) Unauthorized Persons

No unauthorized persons are allowed on the site. The Contractor shall instruct all such persons to keep out and shall take steps to prevent trespassing. However the contractor will make sure to provide free access at any time for Engineer-in-charge/Client/Consultant to the site and other working places.

14. Compliance with Statutes, Regulations, Etc.

The contractor shall conform to the provisions of any statute, ordinance, law, act of the legislature relating to the works, and to the regulations and by-laws of any local or other duly constituted authority and of any water, electric supply and other companies and/or authorities with whose systems the structure is proposed to be connected. The Contractor shall keep the Client/Engineer-in-charge/Consultant indemnified against all fines or penalties or liability of every kind for breach of any such statutory ordinance, law act of the legislation, regulations, and byelaws as aforesaid.

The contractor shall before making any variations from the drawings or specifications that may be necessitated by so regulations, give to the Engineer-in-charge written notice, specifying the variation proposed to be made and the reasons for making it and apply for instructions thereon. The contractor will not execute any work without written permission from the Engineer-in-charge/Consultant.

The contractor shall bring to the attention of the Engineer-in-charge/Consultant all notices required for execution by the said acts, regulations or bye-laws to be given to any authority and pay to such authority, or to any public office all fees that may be properly chargeable in respect of the works, and lodge the receipts with the Engineer-in-charge/Consultant.

15. Setting out

The contractor shall be responsible for the true and proper setting-out of the Works in relation to original points, lines and levels or reference issued by Engineer-in-charge/Consultant in drawing or in writing and for the correctness, subject as above mentioned, of the position, levels, dimensions and alignment of all parts of works and for the provision of all necessary instruments, appliances and labour in connection therewith. If, at any time during the progress of the works, and during defects liability period, any error shall appear or arise in the position, levels, dimensions or alignment of any part of the Works, the Contractor, on being required to do by the Engineer-in-charge/Consultant and/or Client or his authorised representative shall at his own cost, rectify such error to the satisfaction of the Engineer-in-charge. The checking of any setting out or of any line or level by the Consultant shall not in any way relieve the Contractor of his responsibility for the correctness thereof. The Contractor shall carefully protect and preserve the benchmarks; sight-rails, pegs and other things used in setting-out the Works. Any rectification works required should be done by the Contractor at his own cost.

16. Quality of Materials, Workmanship and Test

- (a) All materials and workmanship shall be the best of the respective kinds described in the Contract and in accordance with the Engineer-in-charge/Consultant's instructions and shall be subjected from time to time to such tests as the Consultant may direct at the place of manufacture or fabrication or on the Site or at an approved testing laboratory. The source of supply and / or manufacturing within/ out side India may be inspected by the Engineer-in-charge/Consultant/ any representative as nominated by the Client. The expenditure on this account is deemed to be included in the rate quoted.

The contractor shall upon the instruction of the Consultant's representative furnish him with documentation to prove that the materials & goods comply with the requirements of contract and for requirement stated above. The Consultant may issue instruction in regard to removal of material from site or any work, if these are not in accordance with the contract. The contractor shall provide such assistance instruments, machinery, labour and materials as are normally required for examining, measuring, sampling and testing and material or part of work before incorporation in the works for testing as may be selected and required by the Consultant.

The Engineer-in-charge/Consultant may carry out Third Party Quality Assurance/Audit by an independent agency/ individual/firm/institute at any time. The agency will be permitted and offered all support related to site inspection by the Contractor. Suggestions therein will be carried out without any extra cost.

(b) Samples

- i) All samples of adequate numbers, sizes, shades & pattern as per specification shall be supplied by the contractor without any extra charge. Contractor shall submit Samples to the Consultant for approval. If certain items proposed to be used are of such nature that samples cannot be presented or prepared at the site, detailed literature / test certificate of the same shall be provided instead to the satisfaction of the Consultant. Each Sample will be identified clearly as to material, Supplier, pertinent data such as catalogue numbers and the use for which intended and otherwise as the Consultant may require to review the submittals for the limited purposes required by paragraph (d) below. The numbers of each sample to be submitted will be as specified in the Specifications, or as shall be specified by the Consultant/ Engineer-in-charge. A sample room will be made and maintained with all the approved samples till the end of warranty period / defect liability period.

- ii) Submittal Procedures
- (aa) Before submitting each Sample, Contractor shall have determined and verified all materials with respect to intended use, fabrication, shipping, handling, storage, assembling and installation pertaining to the performance of the Work and All information relative to Contractor's sole responsibilities in respect of means, methods, techniques, sequences and procedures of construction and safety precautions and programmes incident thereto.
 - (ab) Each submittal will bear a specific written indication that Contractor has satisfied Contractor's obligation under the Contract Documents with respect to Contractor's review and approval of that submittal..
 - (ac) At the time of each submission, contractor shall give the Consultant specific written notice of such variations, if any, that the sample submitted may have from the requirements of the contract document. Such notice shall be separate from the submittal and in addition shall cause a specific notation to be made on each sample submitted for review and approval of each such variation
- iii) Review and Approval: Sample shall be reviewed and approved only to determine if the items covered by the submittals will, after installation or incorporation in the work, conform to the information given in the contract documents and be compatible with the design concept of the completed project functioning as a whole as indicated by the contract documents, drawings.
- iv) Review and approval will not extend to means, methods, techniques, sequences or procedures of construction. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions. Contractor shall make corrections required by Consultant and shall submit as required new Samples for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for and by the Consultant on previous submittals.
- v) Above referred review and approval Samples shall not relieve Contractor from responsibility for any variation from the requirements of the Contract Document unless Contractor has in writing called the Consultant/Engineer-in-charge's attention to each such variation at the time of submission as specified above and received written approval of each such variation by specific written

notation thereof incorporated in or accompanying the Sample approval; nor will any approval by Engineer-in-charge /Consultant relieve Contractor from responsibility for complying with the requirements of contract.

- vi) Only when the samples are approved in writing by the Consultant, the contractor shall proceed with the procurement and installation of the particular material / equipment. The approved samples shall be signed by the Consultant for identification and shall be kept on record at site office until the completion and acceptance of the work and shall be available at the site for inspection / comparison at any time. The contractor shall keep with him a duplicate of such samples to enable him to process the matter.
- vii) For items of works where the samples are to be made at the site, the same procedure shall be followed. All such samples shall be prepared at a place where it can be left undisturbed until the completion of the project.
- viii) The Consultant shall communicate his comments / approval to the Contractor to the samples at his earliest convenience. Any delay that might occur in approving of the samples for reasons of its not meeting with the specifications or other discrepancies, inadequacy in furnishing samples of best qualities from various manufacturers and such other aspects causing delay on the approval of the materials / equipment's etc. shall be to the account of the contractor. In this respect the decision of the Engineer-in-charge shall be the final.
- ix) On delivery of the supplies of materials / equipments for permanent works at the site, the contractor shall specifically arrange to get the supply inspected by the Consultant and compared with the approved sample and his specific obtained before using the same in the work.

(c) Cost of Tests

The cost of making any test shall be borne by the Contractor as intended by or provided for the Contract or as found necessary by the Engineer-in-charge/Consultant for ascertaining whether the quality of materials intended to be used by the Contractor in the Works is acceptable, whether any finished or partially finished work is appropriate for the purposes which it was intended to fulfill.

(d) Standards and codes

The Contractor shall at his cost provide one set of approved standards and codes to which the Proposed materials, items and works to be executed shall conform. Such a set shall be handed over to Engineer-in-charge/Consultant for ready reference. All materials, items and works, when submitted for approval shall have reference of Tender Specifications and drawings and of clauses of relevant standard codes for acceptance criteria.

(e) Testing facilities

Deleted

17. Absence of Specifications

If the specifications do not contain particulars of materials and works which are obviously necessary for the proper completion of the works, and the intention to include, which is inferred, all such materials and works shall be supplied and executed by the Contractor without extra charge. If the Contractor requires additional information, he shall, in pursuance of Clause 2 hereof, so request in writing well in advance to commencement of the particular work to the Consultant who will issue such detailed information within a reasonable time.

18. Obtaining Information's related to Execution of work

No claim by the Contractor for additional payment will be entertained which in consequent upon failure on his part to obtain correct information as to any matter affecting the execution of the works, nor will any misunderstandings or the obtaining of incorrect information or the failure to obtain information relieve him from any risks or from the entire responsibility for the fulfillment of the contract.

19. Access for Inspection

Persons nominated by Engineer-in-charge/Consultant shall at all reasonable times have free access to work and/ or to the workshops, factories or other places where materials are lying or from which they are being obtained and the Contractor shall extend necessary service to Engineer-in-charge/Consultant and their representatives every facility necessary for checking measurements, inspection and examination and test of the materials and workmanship.

20. Examination of Work before covering up

(a) No part of the works shall be covered up or put out of view without the written approval of the Consultant and the contractor shall afford full opportunity for the Consultant to examine and measure any work which is about to be covered up or put out of view and to examine foundations

before permanent work is placed thereon. The contractor shall give due notice to the Consultant whenever any such work or foundation is or ready or about to be ready for examination and the Consultant shall, without unreasonable delay, unless he considers it necessary and advises the contractor accordingly, attend for purpose of examining and measuring such work or examining such foundation.

(b) **Uncovering and making openings**

The contractor shall uncover any part or parts of the works or make openings in or through the same as the Consultant may from time to time direct and shall reinstate to make good such part or parts to the satisfaction of the Consultant. No extra payment will be paid for this.

21. Assignment

The contractor shall not, without the prior consent of the Engineer-in-charge assign the Contract or any part thereof, or any benefit or interest therein or there under, otherwise than by:

- A change in favour of the Contractor's bankers of any moneys due or to become due under the Contract, or
- Assignment to the Contractor's insurers (in case where the insurers have discharged the Contractor's loss or liability) of the Contractor's right to obtain relief against any other party liable.

The Contractor shall not sub-contract the whole of the Works. The Contractor shall not subcontract any part of the Works without the prior consent of the Engineer-in-charge/Consultant, except where otherwise provided by the Contract. Any such consent shall not relieve the Contractor from any liability or obligation under the Contract and he shall be responsible for the acts, defaults and neglects of any Subcontractor, his agents, servants or workmen as fully as if they were the acts, defaults or neglects of the Contractor, his agents, servants or workmen. Such Permission may be granted only for the specialized work etc and the decision of Engineer-in-charge/Consultant shall be final.

22. Claims

The contractor shall send to the Engineer-in-charge once in a month an account giving particulars as complete and fully detailed as required of all claims for any additional payments, to which the contractor may consider himself entitled and of all extra or additional / substituted work ordered by the Consultant which he has executed during the preceding month subject to provisions under relevant clauses of contract hereof.

23. Variations

- (a) The Consultant shall make a variation in the form, quality or quantity of the works or any part thereof that may necessary and for that purpose or if for any other reason it shall, in his opinion be desirable, he shall order the contractor to do and the contractor shall do any of the following:
- i) Increase or decrease the quantity of any work included in the contract
 - ii) Omit any such work
 - iii) Change the character or quality or kind of any such work
 - iv) Change the levels, lines, positions and dimensions of any part of the works.
 - v) Execute additional work of any kind necessary for the completion of the works.
 - vi) Change any specified sequence or timing of construction of any part of the work.

No such variation shall in any way vitiate or invalidate the contract, but the cost, if any, of all such variations shall be taken in account for payment to the contractor as an addition or adjustment to the amount of the contract sum. Provided that where the issue of instruction to vary the works is necessitated by some default or breach by the contractor or for which he is responsible, any additional cost attributable to such default or breach shall be borne by the contractor.

- b) Orders for variation to be in writing

The contractor shall make no such variations without an order in writing by the Consultant, provided that no order in writing shall be required for increase up to 02% or decrease in the quantity of any work where such increase or decrease is not the result of an order given under this Clause, but is the result of the quantities exceeding or being less than those stated in the schedule of items.

24. Deleted

25. Virtual Completion Certificate

When the whole of the Works have been substantially and virtually completed and have satisfactorily passed any final test that may be prescribed by the Contract:-

- (a) The Contractor shall give a notice to that effect to the Consultant accompanied by an undertaking to finish any outstanding work during the Defects Liability Period. Such notice and undertaking shall be in writing and shall be deemed to be a request by the Contractor.

- (b) The Consultant shall review whether the works are completed in such a condition so as to be put to its proper or other intended final use and / or occupied without any short comings and no major or minor items of works are remaining which in the opinion of the Consultant will cause undue difficulties in satisfactory use/ occupation of the Works

26. Defect after completion

(a) General

Any defect, shrinkage, settlement or other faults which any appear within the “Defects Liability Period” arising in the opinion of the Engineer-in-charge/Consultant from materials or workmanship not in accordance with the contract, shall upon the direction in writing of the Engineer-in-charge/Consultant / Authorized representative of the Client, and within such reasonable time as shall be specified therein, be amended and made good by the contractor, at his own cost and incase of default, the Engineer-in-charge/Consultant/Client may employ and pay other persons to amend and make good such defects, shrinkage, settlements or other faults and all damages, loss and expenses consequent thereon or incidental thereto shall be make good and borne by the contractor and such damage, loss and expenses shall be recoverable from the bills due or may be deducted from any money due to that may become due to the contractor, or the may in lieu of such amending and making good by the contractor deduct from any monies due to the contractor, a sum, to be determined by the Engineer-in-charge. If no amount is available with the Department, the Department may recover from the dues of another government department

(b) Execution of work of repair etc.

Any defects, shrinkage, settlement or other faults which may appear or be noticed within the defect liability period, and arising in the opinion of the Engineer-in-charge/Consultant from materials or workmanship not having in accordance with the contract, shall upon the direction in writing of the Engineer-in-charge’s/Consultant’s representative and within such reasonable time as shall be specified therein and without any delay, be amended and made good or replaced by the contractor at his own cost.

(c) Cost of Execution of Work of Repair, Etc.

All such works shall be carried out by the Contractor at his own expense if the necessity thereof shall, in the opinion of the Engineer-in-charge/Consultant, be due to the use of materials or workmanship not in

accordance with the Contract, or due to neglect or failure on the part of the Contractor to comply with any obligation, expressed or implied, on the Contractor's part under the Contract.

(d) Contractor's personnel to be at site

During the defects liability period the contractor shall retain at least one of his authorized representative at site along with required tradesmen.

27. Approval and acceptance

(a) Provisional Acceptance

The work shall be deemed to have been provisionally accepted after fulfillment of all the following by the Contractor.

- i). Submitting As-Built Drawings in the form as directed by Engineer in Charge
- ii). Obtaining Certificate of Completion from the Engineer-in-charge

(b) Certificate of Final Completion

The contract shall not be considered as completed until a Certificate of Final Completion shall have been issued by the Engineer-in-charge stating that the Works have been completed to their satisfaction and remedying / rectifying of defects have been satisfactorily performed.

The Engineer-in-charge shall give the Certificate for Final Completion:

- Twenty-eight days after the expiration of the Defects Liability Period
OR
- If different Defect Liability Periods shall become applicable to different sections or parts of the Works, the expiration of the latest of such period OR
- As soon thereafter as any works ordered during such period shall have been completed to the satisfaction of the Client.

Provided always that the issue of the Certificate of Final Completion shall be a condition precedent to payment or return to the Contractor the security deposit and / or Performance security in accordance with the conditions set out in the contract.

28. Works by Other Agencies

The Client/ Engineer-in-charge/Consultant reserves the right to use premises and any portion of the site for the execution of any work not included in this contract which it may desire to have carried out by other persons simultaneously, and the contractor shall allow the reasonable facilities for the execution of such work, but shall not be required to provide any plant or material for the execution of such work except by special arrangement with the employer. Such work shall be carried out in such manner as not to impede the progress of the works included in the contract and the contractor shall not be responsible for any damage or delay which may happen to or occasioned by such work.

29. Insurance Policies

29.1.1 **Employer's Risks**

The Employer's risks are:

- (a)
 - (i) war, hostilities (whether war be declared or not), invasion, act of foreign enemies,
 - (ii) rebellion, revolution, insurrection, or military or usurped power, or civil war,
 - (iii) ionising radiations, or contamination by radio-activity from any nuclear fuel, or from any nuclear waste from the combustion of nuclear fuel, radio-active toxic explosive, or other hazardous properties of any explosive nuclear assembly or nuclear component thereof,
 - (iv) pressure waves caused by aircraft or other aerial devices travelling at sonic or supersonic speed,
- (b) loss or damage due to the use or occupation by the **Employer** of any Section or part of the Permanent Works, except as may be provided for in the Contract,
- (c) loss or damage to the extent that it is due to the design of the Works, other than any part of the design provided by the Contractor or for which the Contractor is responsible, and
- (d) any operation of the forces of nature (insofar as it occurs on the site) which an experienced contractor:
 - (i) could not have reasonably foreseen, or
 - (ii) could reasonably have foreseen, but against which he could not reasonably have taken at least one of the following measures:
 - (A) prevent loss or damage to physical property from occurring by taking appropriate measures, or

(B) insure against.

29.1.2 Insurance of Works and Contractor's Equipment

The Contractor shall, without limiting his or the Employer's obligations and responsibilities under Clause 29.1.1 insure:

- (a) the Works, together with materials and Plant for incorporation therein, to the full replacement cost and it being understood that such insurance shall provide for compensation to be payable to rectify the loss or damage incurred.
- (b) an additional sum of 15 percent of such replacement cost to cover any additional costs of and incidental to the rectification of loss or damage including professional fees and the cost of demolishing and removing any part of the Works and of removing debris of whatsoever nature, and it being understood that such insurance shall provide for compensation to be payable to rectify the loss or damage incurred.
- (c) the Contractor's Equipment and other things brought onto the Site by the Contractor, for a sum sufficient to provide for their replacement at the Site.

The insurance under clause 29.1.2 shall be issued by an insurance company which has been determined by the contractor to be acceptable to the Consultant.

29.1.3 Scope of Cover

The insurance in paragraphs (a) and (b) of Sub-Clause 29.1.2 shall be in the joint names of the Contractor and the **Employer** and shall cover:

- (a) the **Employer** and the Contractor against all loss or damage from whatsoever cause arising (including natural calamities, earthquake, subsidence, landslide, rock slide, flood, storm, cyclone, fire, theft, burglary, strike, riot, sabotage, terrorism), other than as provided in Sub- Clause 29.1.5, from the commencement date until the date of issue of the relevant Taking-Over Certificate in respect of the Works or any Section or part thereof as the case may be, and
- (b) the Contractor for his liability:
 - (i) during the Defects Liability Period for loss or damage arising from a cause occurring prior to the commencement of the Defects Liability Period, and

- (ii) for loss or damage occasioned by the Contractor in the course of any operations carried out by him for the purpose of complying with his obligations under Clauses 26 aforesaid.

It shall be the responsibility of contractor to notify the Insurance Company of any change in the nature and extent of the works and to ensure the adequacy of the Insurance cover at all times during the period of contract.

29.1.4 Responsibility for Amounts not Recovered

Any amounts not insured or not recovered from the insurers shall be borne by the **Employer** or the Contractor in accordance with their responsibilities Clause 29.1.1.

29.1.5 Exclusions

There shall be no obligation for the insurance in Sub-Clause 29.1.2 to include loss or damage caused by the risks listed under sub clause 29.1.1 para a (i) to (iv).

If the Contractor receives instructions from the **Employer** to insure against War Risk, such insurance if normally available shall be effected, at the cost of the **Employer**, with an Insurance Company acceptable to the Consultant and shall be in the joint names of the contractor and the **Employer**.

29.2.1 Damage to Persons and Property

The Contractor shall, except if and so far as the Contract provides otherwise, indemnify the **Employer** against all losses and claims in respect of:

- (a) death of or injury to any person, or
- (b) loss or damage to any property (other than the Works) :

Which may arise out of or in consequence of the execution and completion of the Works and the remedying of any defects therein, and against all claims, proceedings, damages, costs, charges and expenses whatsoever in respect thereof or in relation thereto, subject to the exceptions defined in Sub-Clause-29.2.2.

29.2.2 Exceptions

The "exceptions" referred to in Sub-Clause 29.2.1 are:

- (a) the permanent use or occupation of land by the Works, or any part thereof,
- (b) the right of the **Employer** to execute the Works, or any part thereof, on, over, under, in or through any land,
- (c) damage to property which is the unavoidable result of the execution and completion of the Works, or the remedying of any defects therein, in accordance with the Contract.
- (d) death of or injury to persons or loss of or damage to property resulting from any action or neglect of the **Employer**, his agents, servants or other contractors, not being employed by the Contractor, or in respect of any claims, proceedings, damages, costs, charges and expenses in respect thereof or in relation thereto or, where the injury or damage was contributed to by the Contractor, his servants or agents, such part of the said injury or damage as may be just and equitable having regard to the extent of the responsibility of the **Employer**, his servants or agents or other contractors for the injury or damage.

29.2.3 Indemnity by Employer

The **Employer** shall indemnify the Contractor against all claims, proceedings, damages, costs, charges and expenses in respect of the matters referred to in the exceptions defined in Sub-Clause 29.2.2.

29.3.1 Third Party Insurance (Including Employer's Property)

The Contractor shall, without limiting his or the **Employer's** obligations and responsibilities under Clause 29.2.1 to 29.2.3, insure, in the joint names of the Contractor and the **Employer**, against liabilities for death of or injury to any person (other than as provided in Clause 29.4.1 to 29.4.2 or loss of or damage to any property (other than the Works) arising out of the performance of the Contract other than the exceptions defined in paragraphs (a), (b) and (c) of Sub-Clause 29.2.2.

29.3.2 Minimum Amount of Insurance

Such insurance shall be for at least the amount stated in Clause 29.1.2 above.

29.3.3 Cross Liabilities

The insurance policy shall include a cross liability clause such that the insurance shall apply to the Contractor and to the **Employer** as separate insured.

29.4.1 Accident or Injury to Workmen

The **Employer** shall not be liable for or in respect of any damages or compensation payable to any workman other than for death or injury resulting from any act or default of the **Employer**, his agents or servants. The Contractor shall indemnify and keep indemnified the **Employer** against all such damages and compensation, other than those for which the **Employer** is liable as aforesaid, and against all claims, proceedings, damages, costs, charges, and expenses whatsoever in respect thereof or in relation thereto.

29.4.2 Insurance Against Accident to Workmen

The Contractor shall insure against such liability and shall continue such insurance during the whole of the time that any persons are employed by him on the Works. Provided that, in respect of any persons employed by any Subcontractor, the Contractor's obligations to insure as aforesaid under this Sub-Clause shall be satisfied if the Subcontractor shall have insured against the liability in respect of such persons in such manner that the **Employer** is indemnified under the policy, but the Contractor shall require such Subcontractor to produce to the Consultant, when required, such policy of insurance and the receipt for the payment for current premium.

29.5.1 Evidence and Terms of Insurance

The Contractor shall provide evidence to the Consultant as soon as practicable after the respective insurance have been taken out but in any case prior to the start of work at the Site that insurance required under the Contract have been effected and shall, within 84 days of the Commencement Date, provide the insurance policies to the **Employer**. When providing such evidence and such policies to the **Employer**, the Contractor shall notify the **Engineer** of so doing. Such insurance policies shall be consistent with the general terms agreed prior to the issue of the Letter of Acceptance. The Contractor shall effect all insurance for which he is responsible with insurers and in terms approved by the Consultant.

29.5.2 Adequacy of Insurance

The Contractor shall notify the insurers of changes in the nature, extent or programme for the execution of the Works and ensure the adequacy of the insurance at all times in accordance with the terms of the Contract and shall, when required, produce to the Consultant the insurance policies in force and the receipts for payment of the current premiums.

29.5.3 Remedy on Contractor's Failure to Insure

If the Contractor fails to effect and keep in force any of the insurance required under the Contract, or fails to provide the policies to Consultant within the period required by Sub-Clause 29.5.1, then and in any such case the **Employer** may effect and keep in force any such insurance and pay any premium as may be necessary for that purpose and from time to time deduct the amount so paid from any monies due or to become due to the Contractor, or recover the same as a debt due from the Contractor.

29.5.4 Compliance with Policy Conditions

In the event that the Contractor or the **Employer** fails to comply with conditions imposed by the insurance policies effected pursuant to the Contract, each shall indemnify the other against all losses and claims arising from such failure.

The Contractor shall be entitled to place all insurance relating to the Contract (including, but not limited to, the insurance referred to in Clauses 29.1.2 to 29.1.5, 29.3.1 to 29.3.3 and 29.4.1 to 29.4.2) with insurers from India.

30. Dues not paid by the Contractor

The contractor shall pay all dues or fees to Statutory authorities and Electric and Water supply authorities etc. within due period and indemnify the Client and the Consultant from any claims or compensations or penalties or damages arising out of non-payment of any such dues or fees. However, in case some dues or fees are not paid by him / and or claims for compensations or penalties etc. are raised by the Statutory authorities, the Client/Consultant may deposit the required amount for any or all of the above and recover or deduct the same from any money payable to the Contractor by the Client/Consultant or any other means available to the Consultant/Client such as bank guarantee etc.

31. Billing & Certification

Contractor shall submit monthly running bills in format approved by the Engineer-in-charge for executed works and materials for which secured advance is desired along with required details and measurements as directed by the Consultant. The Contractor shall submit Monthly Progress Report in triplicate in approved format and containing required number of indexed coloured progress photographs. Failure to submit reports may result in holding up of Payment Certificate.

32. Deleted

33. Urgent Repairs

If, by reason of any accident, or failure, or other event occurring to or in connection with the works, or any part thereof, either during the execution of the works, or during period of Defects Liability any remedial or other work or repair, shall, in the opinion of the Engineer-in-charge/Consultant/Client be urgently necessary for the safety of the Works and the Contractor is unable or unwilling at once to do such work or repair, the Engineer-in-charge/Consultant may employ and pay other persons to carry out such work or repair as the case may be and may consider necessary. If the work or repair so done by the other agency is the work which, in the opinion of the Engineer-in-charge/Consultant the Contractor was liable to do at his own expense under the Contract, all expenses incurred by Other agency in so doing shall be recoverable from the Contractor by the Engineer-in-charge/Consultant, or may be deducted by the Engineer-in-charge/Consultant from any monies due or which may become due to Contractor.

34. Boreholes & Exploratory Excavation

If, at any time during the execution of the Works, the Consultant shall require the Contractor to make boreholes or to carry out exploratory excavation, such requirement shall be ordered in writing and shall be deemed to be an additional ordered under the provisions unless a provisional sum in respect of such anticipated work shall have been included in the schedule of items.

35. Fossils, Etc.

All fossils, coins, articles of value or antiquity and structures and other remains or things of geological or archaeological interest discovered on the site of the works shall be the property of the Government.

36. Plant Temporary Works & Materials

(a) Plant, etc. Exclusive use for the Works

All Constructional Plant, Temporary Works and materials provided by the Contractor shall, when brought on to the Site, be deemed to be exclusively intended for the execution of the Works and the Contractor shall not remove the same or any part thereof except for the purpose of moving it from one part of the Site to another, without the consent, in writing of the Consultant, which shall not be unreasonably withheld.

(b) Removal of Plant etc.

Upon completion of the Works, the Contractor shall remove from the Site all the said Constructional Plant and Temporary Works remaining thereon and any

unused materials provided by the Contractor, within 10 days of obtaining the completion certificate.

37. Operations and Maintenance Manual - Deleted

38. Reports by Contractor

- (a) The contractor shall maintain daily weather record. Daily maximum and minimum temperature and corresponding, humidity shall be recorded and charted. Rainy days shall be recorded when the rain lasting more than one hour hampers the work. Any other inclemency in weather shall be recorded. The records shall be regularly shown to the Consultant and his signature obtained.
- (b) The Contractor shall file daily category-wise labour report to the Engineer-in-charge/Consultant. The report shall indicate scheduled requirement against actual strength.
- (c) The Contractor shall prepare Weekly Reports of planned and actual progress of work and subsequent week's scheduled work. These will also include material procurement status. These reports shall be submitted to the Consultant & shall be reviewed in Weekly Co-ordination Meetings.
- (d) The Contractor shall submit Monthly Progress Report as per format approved by Engineer-in-charge/Consultant along with monthly bills.
- (e) The Contractor as directed by the Engineer-in-charge/Consultant shall prepare further Progress Charts and Schedules.

39. Every care has been made to include all the aspects/ terms and condition in these documents. However, during execution, any issue arises, which has not been included in these documents, norms/ rules & regulations/ terms & conditions as prevalent in CPWD shall be followed.

40. Miscellaneous

(a) Monthly Progress Photographs

The Contractor shall arrange at his own cost to maintain a progress record of the works by taking postcard size colour photographs (preferably digitized photographs) minimum 6 Nos. or more per month or fortnight as directed by the Consultant during the constructions stages and after completion and shall supply one set to the Client and one set to the Consultant at no extra cost. These photographs shall also be submitted as part of the Contractors R.A. Bills. The Contractor will be required to submit

monthly reports on the progress of his work as per the format approved by the Engineer-in-charge/Consultant.

(b) Safety Regulations

Contractor shall be fully responsible for the safety of his Employees/Visitors/Contract Labour/Sub-Contractors Labour. The Contractor shall provide first-aid box readily available at site. The Contractor shall provide all safety measures as per labour safety rules applicable

(c) Labour Laws

The Contractor shall strictly adhere to all labour laws prevailing in the region. The contractor shall make timely payment of wages of his labour and the wages paid to the labour shall be equal to or more than the minimum wage prevailing at the time of payment. The Contractor shall comply with all applicable labour legislation.

(d) By-Laws of Statutory Authorities

The Contractor and his labour shall not violate municipal/sanitation/health or any other byelaws.

(e) Tax Deduction at Source

Taxes and surcharge as applicable, shall be deducted from the amount paid to the Contractor towards the value of the work done. The amount so deducted at source, shall be deposited into Government Treasury and a certificate thereof shall be issued to the Contractor.

(f) General Lighting and Securities

The Contractor shall, throughout the execution, completion and remedying of the defects, provide and maintain at his own cost all lights, guards, fencing, warning signs and watching, when and where necessary or recommended by the Engineer-in-charge/Consultant or by any duly constituted authority for the protection, of the works or for the safety and convenience of the public or others.

(g) Definition of “and”, “or”, “and/or”

The terms “and”, “or”, “and/or” used in the context with the description or enumeration of two or more items or components of work or documentation or anything similar shall mean as is relevant and applicable to the text.

(h) Delay in starting the work

No compensation shall be allowed for any delay caused in the starting of the work on account of acquisition of land, encroachment or in the case of clearance of works, on account of any delay in according sanction to estimates in issue of drawings, decisions etc. However, the extension of time shall be granted as per relevant conditions of Contract.

(i) Deleted

(j) Technical Examination

The Consultant/Client shall have the right to cause Audit and Technical Examination of the works and the final bills of the contractor including all supporting vouchers, abstracts, etc. to be made as per payments of the final bill and if as a result of such Audit and Technical Examination the sum is found to have been overpaid in respect of any work done by the contractor under the contract and found not to have been executed, the contractor shall be liable to refund the amount of over payment and it shall be lawful for the Client/ Engineer-in-charge/Consultant to recover the same from the security deposit or Performance Security of the contractor or from any dues payable to the contractor. If it is found that the contractor was paid less than what was due to him under the contractor in respect of any work executed by him under it, the amount of such under payment shall be duly paid. The work comes under the purview of CVC and as such all orders and instructions are applicable to this work.

In the case of any audit examination and recovery consequent on the same the contractor shall be given an opportunity to explain his case and the decision of the Consultant shall be final. Payment on this account will be recovered from the contractor.

In the case of Technical Audit, consequent on which there is a recovery from the contractor, recovery should be made with orders of the Consultant whose decision shall be final. All action under this clause should be initiated and intimated to the contractor within the period of twelve months from the date of completion.

(k) Site instruction book

For the purpose of quick communication between Engineer-in-charge/Consultant and the Contractor or his representative, site instruction book shall be maintained at site as described below:

Any communication, relating the works may be conveyed through records in the site instruction book. Such a communication from Consultant to the Contractor shall be deemed to have been adequately served in terms of the contract. Such site instruction book shall have machine numbered pages in triplicate and shall be carefully maintained and preserved by the Contractor and shall be made available to Engineer-in-charge/Consultant/Client as and when demanded. Any instruction which Engineer-in-charge/Consultant may like to issue to the Contractor may be recorded by the Engineer-in-charge/Consultant in site instruction book and two copies thereof taken by the Consultant for his record.

(l) Signage

With prior approval of the Consultant, the Contractor shall provide at his own cost, a sign board at directed location of overall size 2 meters by 4 meters indicating name of the project as approved by the Consultant. The signboard will be illuminated during night.

(m) Cutting of Trees

Permission of cutting of trees if required will be obtained by Client.

(p) Miscellaneous:-

- (i) All concrete work will be strictly done by weigh batcher/RMC. However no extra payment shall be made for use of Ready Mix Concrete(RMC) for the works. Moderns concrete pump and vibration machines may be provided at site as and when required.
- (ii) All shuttering material to be used at site will be new/just like new and only ply & steel plate will be allowed to be used as directed by Engineer-in-charge/Consultant.
- (iii) The contractor may have adequate generators of required capacity as per site requirement as stand by arrangement.
- (iv) The temporary connection for electric line and water line from local authorities shall be taken by the contractor who will bear the expenditures
- (v) Any dispute arising due to typing mistakes/ omissions in the document the decision of the Consultant will be final
- (vi) Deleted

- (vii) Unless otherwise mentioned in the bill of quantities the measurements of works shall be done as per given specifications (as specified in Technical Specification of the Tender) and if the same is not given in the specification, the same shall be measured as per latest relevant BIS codes in force or CPWD Specifications. The quantity of steel reinforcement and the structural steel sections incorporated in the work shall be measured & paid on the basis of standard coefficients of sections as per BIS Codes of practice.
- (viii) No idling charges or compensation shall be paid for idling of the contractor's labour, staff or P&M etc. on any ground or due to any reason whatsoever.
- (ix) Contractor shall mobilize and employ sufficient resources for completion of all the works as indicated in the agreed Bar Chart/ Network. No additional payment will be made to the contractor for any multiple shift work or other incentive methods contemplated by him in his work schedule even though the time schedule is approved by Engineer-in-charge/Consultant.
- (x) Steel conforming to BIS specifications (latest edition) shall be procured from sources as per list approved by the Consultant by the contractor directly from manufacturers. The manufacturer has to give a certificate that the material supplied is not a re-rolled product. Relevant vouchers & test certificates will be produced by the contractor. Re-rolled sections will not be allowed. Reinforcement steel, structural steel shall be stored and stacked in such manner so as to facilitate easy identification, removal etc. The contractor shall take proper care to prevent direct contact between the steel and the ground/ water for which he shall provide necessary arrangement at his own cost including ensuring proper drainage of area to prevent water logging as per directions of the Engineer-in-charge/Consultant. Steel shall also be protected, by applying a coat of neat cement slurry over the bars for which no extra payment shall be made. Test certificates for each consignment of steel shall be furnished and tests to be got carried out from the authorized laboratory as per the directions of Consultant, before incorporating the materials in the work.
- (xi) Waterproof plywood only or steel plates of minimum thickness as approved by Consultant shall be used for formwork. The shuttering plates shall be cleaned and oiled after every repetition and shall be used only after obtaining approval of Consultant's Engineers at site. The number of repetitions allowed for plywood and steel shuttering shall be at the discretion of Engineer-in-charge/Consultant depending upon the condition of shuttering surface after each use

and the decision of Engineer-in-charge/Consultant in this regard shall be final and binding on the contractor. No claim whatsoever on this account shall be admissible.

- (xii) RECORDS OF CONSUMPTION OF CEMENT & STEEL - For the purpose of keeping a record of cement and steel received at site and consumed in works, the contractor shall maintain a properly bound register in the form approved by the Consultant, showing columns like quantity received and used in work and balance in hand etc. The contractor's representative shall sign this register daily.
- (xiii) The register of cement & steel shall be kept at site in the safe custody of Consultant during progress of the work. This provision will not, however, absolve the contractor from the quality of the final product.
- (xiv) In case cement or steel quantity consumed is lesser as compared to the theoretical requirement of the same as per CPWD (as the case may be) specifications/ norms, the work will be devalued and/ or a penal rate (i.e. double the rate at which cement/ steel purchased last) recovery for lesser consumption of cement/ steel shall be made in the item rates of the work done subject to the condition that the tests results fall within the acceptable criteria as per CPWD (as the case may be) specifications otherwise the work shall have to be dismantled and redone by the contractor at no extra cost. In case of cement, if actual consumption is less than 98% of the theoretical consumption, a recovery shall be affected from the contractor's dues at the penal rate for the actual quantity which is lower than 98% of theoretical consumption.
- (xv) To ensure that the services under the scope of this contract are in accordance with the specifications, the Contractor shall adopt Quality Assurance Programme to control such activities at the necessary points. The contractor shall prepare and finalize such Quality Assurance Programme within 15 days from letter of intent. Consultant shall also carryout quality audit and quality surveillance of systems and procedures of Contractor's quality control activities. A Quality Assurance Programme of Contractor shall generally cover the following:
- a) Procedure for selection and approval of material sources.
 - b) Type, frequency, sampling and procedure of tests at site and laboratories.
 - c) Work instruction for various stages of work.
 - d) Formats for carrying out various tests.

e) Checklist for Construction Practices.

The instruction, approvals are given by the Consultant to Contractor shall hold good till the same not objected by client. In case instructions and approvals are given by client, the same shall supersede the instruction of Consultant. In all case decision of Client shall be final and binding for contractor.

- (xviii) The Contractor shall co-operate with other agencies working in the same project, compare plans, specifications and the time schedules and so arrange his work that there will be no interference. The Contractor shall forward to the Consultant all correspondences and drawings exchanged. Failure to check plans for conditions will render the Contractor responsible for bearing the cost of any subsequent change found necessary or damages done.

However, the Contractor shall afford necessary facilities to execute the work simultaneously with other agencies executing the works for the same project. The Client/ Engineer-in-charge/Consultant shall entertain no claim on this account.

41.0 Co-ordination Meeting

The Contractor shall be required to attend co-ordination meetings with the Engineer, the Consultant and the other Contractors during the period of Contract as instructed by the Engineer. All costs incidental to such interaction shall be to the Contractor's account and no claim will be entertained by the Employer/Engineer on this account.

42.1 Site Development

- a) Proper arrangement of security, safety, transportation, manpower, lighting arrangement to be maintained during execution of works at night.
- b) For rapid execution of work, contractor has to arrange their own machinery, tools and tackles needed for the work.
- c) For diversion of under ground services proper arrangement to be made by the contractor with the approval of Engineer.

42.2.1 Contractor's Working Area

Suitable working area will be provided by the Engineer to the Contractor. The Contractor may have to carry out some cutting / filling work for making his working area. The cost of all such Works shall be deemed to have been included in the rates and prices quoted for the Works and no extra payment shall be made on this account.

42.2.2 Contractor's Temporary Structures

The Contractor may, at his own expense and subject to the approval of the Engineer and statutory authorities, construct offices, stores, Workshop in the area allocated to him and remove the same as per the orders of the Engineer on completion of Works. The Contractor shall furnish such details of his Temporary Works as may be called for by the Engineer and the Contractor shall satisfy the Engineer as to their safety and efficiency. Engineer may direct those Temporary work which he considers unsafe or inefficient be removed and replaced in a satisfactory manner. The Contractor shall immediately follow Engineer's directions/ instructions.

The Contractor shall make his own arrangement at his own expense for labour camp / accommodation of his labour and staff and their conveyance to Site as no workers/ staff shall unless with the specific approval of the Engineer be allowed to stay within the Site. Gate passes shall be issued by the Engineer to authorise the Contractor's staff and workers to enter the Site.

42.2.3 Procurement of Various Materials

The Employer will not supply any construction materials required for the Works under this Contract. The Contractor must, therefore, make his own arrangements for timely procurement of various materials including steel and cement. Prior approval of each and every material including steel cement, aggregate, bricks etc or any other fittings & fixtures to be taken from engineer before its procurement to site. However in case of excessive delay in procurement of various materials, the engineer may also take decision of procurement of material directly and the cost will be recovered from the contractor.

42.2.4 Water Supply & Power Supply

The Contractor shall make his own arrangement for water supply at Site for drinking as well as construction purposes at his own cost. The Contractor shall also make his own arrangements for power supply at Site for construction, testing & commissioning of all services and general use at his own cost.

Non-availability of power supply and/or water from whatever source shall not entail any additional claims or extension of Contract period in this account.

42.2.5 Site office

A Sample room and reasonably furnished site office accommodation with AC with toilets & pantry with file storage facility along with computers & printers and its consumables, a telephone with STD facility with Fax machine to be made available as per requirements given by the Engineer. Electricity & drinking water will have to be provided by the contractor at his own cost for the site office.

In case suitable existing building/accommodation is available at site, the same may be furnished as above with the consent of the Consultant.

42.2.7 Mix Design of Concrete

The contractor shall carry out the mix design for the relevant item of concrete from a reputed institution/laboratories as approved by Engineer at his own expenses within 15 days from notification of award. Prior approval of engineer is to be taken before the samples (Cement, Coarse & fine aggregates) sent to the Institution for Mix design. The decision of engineer shall be final and binding for above. The design mix required may with or without admixtures.

43.0 DELETED

44.0 Rates/Prices

The quoted rates/prices for the items shall be complete in all respect including all labour, material, plant and machinery, tools and tackles, all taxes, duties, levies, octroi, statutory levies applicable from time to time and others as specified in SCC etc. The contractors attention is invited towards different floor finish and their respective finish levels as indicated in architectural drawings, and nothing extra will be payable for additional mortar bed required to achieve uniform finished levels. The Contractor should quote his rates/prices accordingly for the complete items in all respects.

ADDITIONAL SPECIFIC CONDITONS OF CONTRACT
AND
SPECIFICATIONS

(A) RELATING TO CIVIL WORKS

1.0 General

1.1 The following Additional Specific Conditions and specification shall be read in conjunction with General Conditions of Contract and Specific Conditions of Contract. If there are any provisions in these Additional Specific Conditions which are at variance with the provisions in the above mentioned documents, the provisions in these Additional Specific Conditions shall take precedence.

1.2 These additional specific conditions and specification shall be considered as an extension and not as a limitation of obligation of the preference.

- * For items not covered in CPWD Specification, the work shall be done as per the latest relevant IS Code of practice.
- * For item not covered by any of the above the installation shall be done as directed by the Engineer and as per sound engineering practices.

2.0 INSPECTION & TESTING

2.1 The Contractor shall provide all necessary instruments such as Theodolite, Dumpy level, steel tapes, weighing machine, plumb bobs, spirit levels, hammers, micrometers, thermometers, hydraulic testing machine, smoke test machine and labour for testing. The Contractor shall make adequate records of the test procedures and readings, shall repeat any tests requested by the Engineer and shall provide test certificates signed by an properly authorised person. Such test certificates shall cover all Works. All such equipments shall be tested for calibration at any approved laboratory.

2.2 If test fail to demonstrate the satisfactory nature of the installation or any part thereof, then no claims for the extra cost of modifications, replacement or retesting will be considered. The decision of the Engineer shall be regarded as final as to what constitutes a satisfactory test.

3.0 Reference Points

- 3.1 Contractor shall provide permanent bench marks, flag tops and other reference points for the proper execution of work and these shall be preserved till the end of Works.
- 3.2 All such reference points shall be in relation to the levels and locations, given in the Architectural and plumbing drawings.

4.0 Cutting and Making Good

- 4.1 No structural member shall be chased or cut without the written permission of the Engineer.

END OF VOLUME - III