

भारतीय उष्णदेशीय मौसम विज्ञान संस्थान (आईआईटीएम)

पाषाण, पुणे – 411 008

INDIAN INSTITUTE OF TROPICAL METEOROLOGY (IITM)

PASHAN, PUNE-411 008

निविदा सूचना सं. IITM/CE/WORKS/ROAD/2014-15/09

TENDER NOTICE No. IITM/CE/WORKS/ROAD/2014-15/09

ई-निविदा सूचना-TENDER NOTICE

निदेशक, भारतीय उष्ण/देशीय मौसम विज्ञान संस्थान, डॉ. होमी भाभा रोड, पाषाण, पुणे – 411 008 (भारत) पीडब्ल्यूडी/एमईएस/सीपीडब्ल्यूडी/रेलवे/पी एंड टी की अनुमोदित ठेकेदारों की सूची में पंजीकृत ठेकेदारों/समुचित श्रेणी में अन्य सरकारी विभागों के अनुभवी औद्योगिक ठेकेदारों से निम्नलिखित कार्य हेतु पृथक मुहरबंद निविदाएं दो कवर प्रणालियों में (भाग-I तकनीकी बोली, भाग-II – वाणिज्यिक बोली) आमंत्रित करते हैं :

Director, Indian Institute of Tropical Meteorology, Dr. Homi Bhabha Road, Pashan, Pune-411 008, (India). Invites sealed separate tenders **In TWO COVER systems** (Part-I – Technical Bid, Part-II – Commercial Bid) in separate sealed covers from Contractors registered in the approved list of contractors of PWD/MES/ CPWD/ Railways/P&T/Industrial Experienced contractors and any other government departments inappropriate class for following work:

कार्य का नाम : आईआईटीएम, पुणे के कार्यालय एवं कॉलोनी परिसर की सड़क की मरम्मत

Name of work: REPAIRS TO ROAD OF OFFICE AND COLONY CAMPUS AT IITM, PASHAN, PUNE.

निविदा दस्तावेज संस्थान की वेब साइट

<http://www.tropmet.res.in> या ई-प्रोक्यूरमेंट वेब

साइट <http://eprocure.gov.in> से डाउनलोड किए जा सकते हैं और संस्थान के सिविल विंग से भी प्राप्त किए जा सकते हैं।

Tender documents can be down loaded from the institute website <http://www.tropmet.res.in> or e – procurement web site <http://eprocure.gov.in> and can also be obtained from the civil wing of the institute.

निविदा दस्तावेज शुल्क

: ₹ 5000/-, ( पाँच हजार केवल) (अप्रतिदेय)

निदेशक, आईआईटीएम, पुणे के नाम देय डिमांड ड्राफ्ट द्वारा

The tender document fee

: Rs 5000/-, (Rs Five thousand only) [Non Refundable] by demand draft drawn in favour of Director, IITM Pune.

निविदा दस्तावेजों की जारी करने की तिथि 26/02/2015

Date of issue of tender documents : 26/02/2015

बोली-पूर्व बैठक : 05/03/2015

Pre - Bid Meeting : 05/03/2015 (1100rs)

बोली-पूर्व बैठक का स्थान : भारतीय उष्णदेशीय मौसम विज्ञान संस्थान,

डॉ. होमी भाभा रोड, पाषाण, पुणे 411 008

Venue of Pre-Bid meeting

: Indian Institute of Tropical Meteorology,  
Dr. Homi Bhabha Road Pashan - Pune 411 008

आईआईटीएम, पुणे में निविदा प्राप्त होने की अंतिम तिथि 18/03/2015 (1230 बजे)

Last date of receipt of Tender at IITM, Pune: 18/03/2015 (1230hrs)

निविदा खोलने की तिथि (केवल तकनीकी बोलियाँ) 18/03/2015 (1500 बजे)

Opening of Tenders (Technical Bids only) : 18/03/2015 (1500hrs)

संस्थान को किसी निविदा या सभी निविदाओं को बिना कारण बताए निरस्त करने का अधिकार है।

The Institute reserves the right to reject any or all tenders without assigning any reason thereof.

सिविल इंजीनियर/Civil Engineer

कृते निदेशक/For Director

भारतीय उष्णदेशीय मौसम विज्ञान संस्थान (आईआईटीएम)

पाषाण, पुणे - 411 008

निविदा सूचना सं. IITM/CE/WORKS/ROAD/2014-15/09

ई-निविदा सूचना

निदेशक, भारतीय उष्णदेशीय मौसम विज्ञान संस्थासन, डॉ. होमी भाभा रोड, पाषाण, पुणे - 411 008 (भारत) पीडब्ल्यूडी/एमईएस/सीपीडब्ल्यूडी/रेलवे/पी एंड टी की अनुमोदित ठेकेदारों की सूची में पंजीकृत ठेकेदारों/समुचित श्रेणी में अन्य सरकारी विभागों के अनुभवी औद्योगिक ठेकेदारों से निम्नलिखित कार्य हेतु पृथक मुहरबंद निविदाएं दो कवर प्रणालियों में (भाग-I तकनीकी बोली, भाग-II - वाणिज्यिक बोली) आमंत्रित करते हैं :

कार्य का नाम : आईआईटीएम, पुणे के कार्यालय एवं कॉलोनी परिसर की सड़क की मरम्मत

निविदा दस्तावेज संस्थान की वेब साइट

<http://www.tropmet.res.in> या ई-प्रोक्यूरमेंट वेब

साइट <http://eprocure.gov.in> से डाउनलोड किए जा सकते हैं और संस्थान के सिविल विंग से भी प्राप्त किए जा सकते हैं।

निविदा दस्तावेज शुल्क

: ₹ 5000/-, ( पाँच हजार केवल) (अप्रतिदेय)

निदेशक, आईआईटीएम, पुणे के नाम देय डिमांड ड्राफ्ट द्वारा

निविदा दस्तावेजों की जारी करने की तिथि 26/02/2015

बोली-पूर्व बैठक

:

05/03/2015

बोली-पूर्व बैठक का स्थान : भारतीय उष्णदेशीय मौसम विज्ञान संस्थान,

डॉ. होमी भाभा रोड, पाषाण, पुणे 411 008

आईआईटीएम, पुणे में निविदा प्राप्त होने की अंतिम तिथि 18/03/2015 (1230 बजे)

निविदा खोलने की तिथि (केवल तकनीकी बोलियाँ) 18/03/2015 (1500 बजे)

संस्थान को किसी निविदा या सभी निविदाओं को बिना कारण बताए निरस्त करने का अधिकार है।

सिविल इंजीनियर

कृते निदेशक

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TENDER NOTICE NO. **IITM/CE/WORKS/ROAD/2014-15/09**

**NAME OF WORK:** REPAIRS TO BITUMINUS ROAD  
FOR OFFICE AND COLONY CAMPUS AT IITM,  
PASHAN, PUNE-411008

**VOLUME – I**

**TECHNICAL BID**

**TENDER FOR**  
**REPAIRS TO BITUMINUS ROAD FOR OFFICE AND COLONY CAMPUS AT IITM,**  
**PASHAN, PUNE**

**FOR**  
**INDIAN INSTITUTE OF TROPICAL METEOROLOGY**  
**DR. HOMI BHABHA ROAD, PASHAN, PUNE - 411008, MAHARASHTRA.**

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**NOTICE  
INVITING TENDER**

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**INDIAN INSTITUTE OF TROPICAL METEOROLOGY (IITM)  
PASHAN, PUNE-411 008**

**TENDER NOTICE No. IITM/CE/WORKS/ROAD/2014-15/09**

**e-TENDER NOTICE**

Director, Indian Institute of Tropical Meteorology, Dr. Homi Bhabha Road, Pashan, Pune-411 008, (India). Invites sealed separate tenders **In TWO COVER systems** (Part-I – Technical Bid, Part-II – Commercial Bid) in separate sealed covers from Contractors registered in the approved list of contractors of PWD/MES/ CPWD/ Railways/P&T/Industrial Experienced contractors and any other government departments in appropriate class for following work:

**Name of work: REPAIRS TO ROAD OF OFFICE AND COLONY CAMPUS AT IITM, PASHAN, PUNE.**

Tender documents can be down loaded from the institute website <http://www.tropmet.res.in> or e – procurement web site <http://eprocure.gov.in> and can also be obtained from the civil wing of the institute.

**The tender document fee:** Rs 5000-/, (Rs Five thousand only) [Non Refundable] by demand draft drawn in favour of Director, IITM Pune.

**Date of issue of tender documents** : 26/02/2015  
**Pre - Bid Meeting** : 05/03/2015 (11:00rs)  
**Venue of Pre-Bid meeting** : Indian Institute of Tropical Meteorology,  
Dr. Homi Bhabha Road Pashan - Pune 411 008

**Last date of receipt of Tender at IITM, Pune:** 18/03/2015 (12:30hrs)  
**Opening of Tenders (Technical Bids only)** : 18/03/2015 (15:00hrs)

The Institute reserves the right to reject any or all tenders without assigning any reason thereof.

Civil Engineer  
For Director

**SALIENT FEATURES:**

**SCOPE OF WORK:** The work has been divided in three parts:

**PART-A:** Office road

**PART-B:** Colony campus main road starting from D.B Gate to Colony Gate.

**PART-C:** Colony campus internal road.

Name of Work	<b>REPAIRS TO ROAD OF OFFICE AND COLONY CAMPUS AT IITM, PASHAN, PUNE.</b>
Estimate value	<b>Rs 95 Lacks</b>
Period of Completion	<b>30 days</b> from the date of handing over of site to start the work.
Cost of Tender Documents	Rs 5000-/, (Rs Five thousand only) [Non Refundable] by demand draft drawn in favour of Director, IITM Pune.
Period of Issue of Tender Documents	FROM 26/02/2015 TO 18/03/2015 (During office hours)
Earnest Money Deposit (EMD)	<b>Rs.1,90,000=00(Rupees One Lacks Ninety Thousand only)</b> By Demand Draft, drawn from any Nationalized Or Scheduled Banks in India payable at Pune in favor Of The Director, IITM (or) By Irrevocable Bank Guarantee from any Nationalized or Scheduled Banks in India.
Last date for submission of bids	18/03/2015 at 12:30 Hrs
Opening of Technical bid	18/03/2015 at 15:00 Hrs



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## 1. General Terms

- 1.1. The Contractor must quote the rates both in figures and words. All erasures and alterations made must be dated & initialed by the contractor filling the tender. Over writing of figures is not permitted. Failure to comply with either of these conditions will render the tender liable for rejection. No advice for any change in rate or conditions received after the opening of the tender will be entertained. Errors in rates quoted and amount quoted shall be dealt with in the following manner. In the event of a discrepancy between the rates quoted in words and the rates in figures, the former shall be deemed to be correct. **[Note: The rate shall be quoted as per commercial bid format mentioning basic rate, taxes and total rate inclusive of all taxes in prescribed column.]**
- 1.2. In the event of an error occurring in the amount column of the Schedule of Quantities as a result of the wrong extension of the unit rate and the quantity, the unit rate shall be regarded, as firm and extension shall be amended on the basis of the unit rates. All the errors in totaling in the amount column and in carrying forward the totals shall be corrected.
- 1.3. The tender total shall be accordingly amended except that there shall be no rectification of any errors, omissions, or wrong estimate, in the prices inserted by the contractor in the schedule of quantities.
- 1.4. ~~Where alternative items (R/O) are given, only the rates in figures and words are to be entered and not the amounts thereof. A tender, which does not show the rates in figures and words for alternative items are liable to be rejected. The Owner /Consultant reserves the rights to take into account any of the alternative items during the execution of the work, partly or fully as required. [Clause: deleted]~~
- 1.5. The Contractors must obtain for themselves on their own responsibility and at their own expense all the information which may be necessary, including risks, contingencies and other circumstances to enable them in making a proper tender and for entering into a contract, and must examine the drawings, specifications and inspect the site of the work and acquaint themselves with all local conditions, access to the work site, nature of the work and all the matters pertaining thereto before submitting the tender. They can also get any clarifications required from the /Consultant, before tendering, by contacting them at their office during working hours.
- 1.6. The Schedule of Quantities is only probable quantities and is liable to alterations by omission, deductions or additions to any extent. Payments will be made on the actual quantities of work done at accepted unit rate. Each tender should contain not only the rates but also the value of each items of work entered in a separate column and all the items should be totaled in order to show the aggregate value of the entire tender. Corrections, which are not attested, may entail the rejection of the tender. Rates should be quoted both in figures and words in the columns specified.
- 1.7. The rates quoted in the tender shall include cost of all materials, labour and all charges, scaffolding, electric charges, temporary plumbing, cost of cisterns, hire for any tools and plants, shed for materials, marking out and cleaning of site, watering, curing all cement work, concrete as mentioned in the specifications, complete in all respects besides sanitary facilities for employees & workmen of contractor, site office & daily regular housekeeping & safety measures. The rates quoted in the tender shall be treated as rates for finally completing the item of work.
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- 1.8. The rates quoted shall be deemed to be for the finished work to be measured at site. Contractors must include in their rate transportation of materials to site, sales tax, excise duty, octroi and any other tax and duty or other levy levied by the Central Government, or any State Government or Local authorities, if applicable. The /Consultant will not entertain any claim in respect of the above levies.
- 1.9. Applicable VAT / Works Contract Tax /Service Tax etc. needs to be clearly mention for each item under tax. Documents of registration under these acts are necessary to be submitted along with bid. **[Note: The rate shall be quoted as per commercial bid format mentioning basic rate, taxes and total rate inclusive of all taxes in prescribed column.]**
- 1.10. The rates quoted shall include all expenditure involved in providing contributions towards provision for Provident Fund / ESI wherever applicable, Insurance coverage for all the works, Labour cum third party risk also (i.e. Car policy, Workmen's compensation Policy and third party liability)
- 1.11. The calculations made by the Contractors should be based upon quantities of several items of work, which are furnished for the tender's convenience in the bill of quantities, but it must be clearly understood that the contract is a unit rate contract and not a lump sum contract. The Owner does not in any way assure or guarantee that the said probable quantities are correct or that the work would correspond thereto. The items of work irrespective of the quantities, which may vary, shall be carried out at the same accepted tender rates and no escalation in the rates will be entertained whatsoever.
- 1.12. The successful Contractor shall give the acceptance of the tender Within 3 days from the receipt of the LOI from the Owner ( IITM, Pune), the successful Contractor shall be bound to implement and contract by signing the agreement within 14 days in accordance with the draft agreement.
- 1.13. All compensations or other sums of money payable by the Contractor to the Owner under the terms of this contract will be deducted from the bill amounts or from the Retention Money, if the amount so permits and the Contractor shall unless such retention money has become otherwise payable, within ten days after such deductions, make good in cash the amount so deducted.
- 1.14. The Contractor shall carry out all the works strictly in accordance with the drawing, details and instructions of the Consultant / Owner. If in the opinion of the /Consultant, changes have to be made in the design, and they desire the Contractor to carry out the same, the Contractor shall be, bound to comply. The /Consultant's decisions in such cases shall be final. Compensation if payable for this change will solely be at the discretion of the /Consultant.
- 1.15. The Contractor is bound to carry out any items of work as instructed by the /Consultant if such items of work are deemed necessary by the /Consultant / Owner for the completion of the job even though such items are not included in the Schedule of Quantities and rates. The /Consultant will issue schedule of instructions in respect of such additional items and their quantities in writing with the prior consent in writing of the Owner. Contractor shall forward the rate analysis in writing to /Consultant who will review and forward the same with comments to the Owner.
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- 1.16. The Contractor shall not be entitled to any compensation for any loss suffered by him on account of delays in commencing or executing the work whatever the cause of delay may be, including delays arising out of modifications to the work entrusted to him or in any Sub-contracts connected therewith or delays in awarding contracts for other trades of the project or in commencement of completion of such other works or in procuring Government controlled or other building materials or for any other reason whatsoever and the Owner shall not be liable for any claim in respect thereof. The /Consultant does not accept liabilities for any sum besides the tender amount, subject to such variations as are provided for herein and as instructed by /Consultant / Owner.
- 1.17. The successful Contractor must co-operate and co-ordinate the work with the work of all the other Contractors appointed by the Owner, so that the work shall proceed without delay and to the satisfaction acceptance of the /Consultant / Owner.
- 1.18. The Contractors' co-ordination with other Contractors appointed by the Owner is essential to maintain smooth progress of work and any delays, which in the opinion of the /Consultant is due to non co-ordination and in efficient management of the Contractor, will not be entertained for any extension of time.
- 1.19. The /Consultant / Owner will acknowledge the tenders received.
- 1.20. The price quoted, time required for the completion, and the standard of workmanship and technical and financial capabilities of the Contractors will be the main criteria for considering the tenders.
- 1.21. The Owner do not bind themselves to accept the lowest or any tender and reserve themselves that right to accept or reject any or all the tenders, whether in the whole or in part without assigning any reason for doing so.
- 1.22. Every Contractor shall furnish along with the tender the latest Income Tax Clearance Certificate without which this tender is likely to be rejected.

## **2. NON TENDERED/ Extra Items ITEMS:**

The rate of extra items shall be worked out in accordance with the following rules.

**a.** The rates for the extra items shall be derived from the rate of an appropriate item of the similar class for which the rate has already been accepted, where same can be directly derived.

**b.** The contractor shall be bound to carry out any extra items of work as per site requirement. The rate for extra items shall be derived from the rate already quoted. Where the items are not specified in the BOQ the rate shall be worked out at cost of material+labour+ Taxes +10% overheads, wastage and transportation & profit.

**c.** Wherever applicable the basic rate difference in materials (mentioned in tender) shall be payable plus-minus without any profits, overheads etc., on said rate difference.

**d.** Variation and Non- Tendered items, if any, shall be carried out under specific written instruction by Consultants and prior sanction by the Institute. Sanction for all

extra items shall be sought by the contractor within seven days from the occurrence such necessity.

### **3. GUARANTEE**

3.1. The contractor shall guarantee that the items supplies are in full accordance with the requirements of enquiry specifications any additions / revisions / deviations in the same as agreed between Owner / /Consultant / Contractor as per various documents.

3.2. Schedule for completion of work in the form of "PERT CHARTS" and the Contractors should give "BAR CHARTS" within ten days of Award of contract.

3.3. Time of completion and very good quality of all finished works should be treated as "ESSENCE" of this contract. The Contractor must conceive and adhere to these requirements while quoting for this tender.

### **4. ROYALTY CHARGE**

4.1. The contractor shall quote their offer including royalty charges required for construction material as well as required for execution of work as per standard local rules. Proof of challans for royalty paid shall be submitted along with monthly bills, failing which the certain cost will be kept from every running account bill and the same will be released only after submission of satisfactory proof of royalty challans.

4.2. Addendums or Corrigendum's

4.2.1. The IITM may issue Addendums or Corrigendum's at any time prior to the date for submission of the tender and these will form the part of the contract. This notice inviting tenders will form part of the Tender Document.

### **5. BID SUBMISSION:**

#### **Technical Bid Envelope:**

**Forwarding Letter, Copy of Pre-bid M.O.M, complete tender documents, company profile, details of work experience for similar contracts completed/in hand, BAR-CHART and related documents as mentioned in tender duly signed and stamped on each page, EMD & Tender Fee.**

**Commercial Bid Envelope: Duly filled and signed.**

**NOTE: 1) Bid should be submitted on or before due date and time i.e. 18/03/2015 at 12:30 Hrs.**

**2) Bid received after due date and time will be rejected.**

**DECLARATION**

5.1.1 / WE hereby declare that I / we have read and understood in the language known to me/us the above instructions for the guidance of the contractors.

**SIGNATURE OF THE CONTRACTOR**

**STAMP OF CONTRACTING FIRM**

**LOCATION DATE**

**INSTRUCTIONS  
TO  
CONTRACTORS**

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## PART – 2 INSTRUCTIONS TO CONTRACTORS

### 1. GENERAL

1.1. This contract comprises of Instructions to Contractor, General Terms and Conditions of Contract, Special Conditions of Contract (SCC), Safety rules & regulations, Technical Specifications, Drawings, Bill of Quantities, Agenda / Corrigendum etc. which are also part of the Contract and the Contract Documents.

2. **DESCRIPTION & LOCATION OF SITE:** REPAIRS TO ROAD OF OFFICE AND COLONY CAMPUS AT IITM, PASHAN, PUNE. : The work has been divided in three parts:

**PART-A:** Office road

**PART-B:** Colony campus main road starting from D.B Gate to Colony Gate.

**PART-C:** Colony campus internal road.

**[Note: Site will be shown to bidders and scope of work will be explained at time of PRE-BID meeting.]**

### 3. SITE VISITS

3.1. The Contractor is deemed to have visited the site of work at his own cost, before submitting the tender, in order to acquaint self with the general terrain of site, subsoil conditions, access to site, working space within allotted premises, and other conditions like availability and quality of water, labour, construction materials and matters related to construction work. Non familiarity with the site conditions will not be considered as the basis for any claim for additional compensation, extension of time for completion, any claim whatsoever or for not carrying out the work in conformity with the Drawings and Specifications.

4. The Contractor shall register as Contractor under the provisions of the Contract Labour (Regulation & Abolition) Act 1970 and the Contract Labour (Regulation and Abolition) rules 1974 and obtain necessary Labour license under the above Acts. The Contractor shall have his own code numbers for payment of ESI and PF contributions of his employees under Employees State Insurance Act 1948 and the Employees Provident Fund and Family Pension Funds Act 1952 respectively.

5. It is hereby declared that the Contractor for the purposes of this contract is an independent Contractor and that the persons employed or engaged by the Contractor in connection with the execution of the work by the Contractor or otherwise in pursuance of this contract shall be the employees of the Contractor and not that of the company. The Contractor shall make it clear to the persons employed or engaged by him at the time of their employment that the Contractor is their employer and shall in particular, in all cases, where letters of appointments or other similar letters or documents are given to the persons, specify in such letters or documents that the Contractor is their employer. The Contractor shall indemnify and keep indemnified the company against all actions, suits, proceedings, claims and demands whatsoever that may be brought or made against the company by or on behalf of any persons, body, bodies authority or authorities whomsoever and whatsoever and all dues, penalties, levies, taxes, losses, damages, cost, charges, expenses, or other liabilities whatsoever which the company may now or hereafter be liable to pay, incur or sustain by

reason of or in consequence of the company being held or considered to be the employer of any such person or persons.

6. LOCAL LAWS AND REGULATIONS

6.1. It would be the full responsibility of the Contractor to abide by all local laws, regulations etc. prevailing from time to time, prevailing and in effect from time to time during the contract period.

7. ARTICLES OF VALUE FOUND

7.1. All gold, silver and minerals of any description and all precious stones, coins, treasure relics, antiquities and other similar things which shall be found in under or upon the site, shall be the property of the Owner, and the Contractor shall duly preserve the same to the satisfaction of the Consultant/Consultant and shall from time to time deliver the same to such person or persons indicated by the Owner.

8. GUARANTEE

8.1. In addition to the guarantee against defects, the Contractor shall arrange to endorse the related manufacturers' guarantee, test certificates for bought out items of his supply in the Owner's name at no extra cost. Endorsement of all material with stamp number, should match the documents such as challans etc.

9. ~~Rate only (RO) ITEMS – The Contractor shall quote only rates for items wherever it is marked with quote rate item (R/O) in the 'Quantity' column. [Clause deleted]~~

10. RIGHT TO ACCEPT OR REJECT TENDER - The Institute reserves the right to accept or reject any or every tender without assigning any reasons whatsoever / or to negotiate with the Tenderer(s) in the manner the Owner considers suitable.



**GENERAL CONDITIONS  
OF  
CONTRACT**

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## GENERAL CONDITIONS OF CONTRACT

### 1. DEFINITIONS

**1.1** The contract document shall consist of the various documents listed under clause 2.0 here below.

**1.2** The owner, the contractor and the Consultant/Consultants representative are those mentioned as such in the Agreement and shall include their legal representatives, assigns or successors. They are treated throughout the Contract document as if each were of the singular number and masculine gender.

**1.3** The "Site" shall mean the site of the Contract Works including any building and erections thereon and any other land allotted by the Owner / Consultant/Consultants representative for Contractors' use.

**1.4** The term "Sub-Contractor", as employed herein, includes those having a direct contact with the Contractor and it includes one who furnishes materials worked to a special design according to the plans or specifications of the work but does not include one who merely furnishes materials, not so worked. Anyone doing work on a piece rate basis shall be deemed a Sub-Contractor.

**1.5** "Written Notice" shall be deemed to have been duly served if delivered in person to the individual or to a member of the firm or to an office of the Corporation for whom it is intended, or if delivered at or sent by registered mail to the last business address known to him who gives the notice.

**1.6** The term "Work" of the Contractor or Sub-Contractor includes labour or material or both.

**1.7** "Site Engineer/Site Manager" shall mean the person appointed by the Consultant/Client representative to inspect and certify measurement of the works at site and for supervising the works on site.

**1.8** All the time limits stated in the Contract Document are the essence of the Contract.

**1.9** The law of the place of work shall govern the construction under this contract.

**1.10** The "Date of Virtual Completion" of the Work or specified portion of the work is the date when construction is sufficiently completed, in accordance with the Contract Documents as modified by any change or variation order agreed to by the parties, so that the Owner can take over such completed work and occupy for the intended use of that portion, as per certificate issued by Consultant/Consultants representative.

### 2. CONTRACT DOCUMENT:

The following documents shall constitute the Contract Document:

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- 2.1. Articles of Agreement, executed by the Owner and the Contractor.
- 2.2. Notice Inviting Tender.
- 2.3. General Conditions of Contract.
- 2.4. Instructions to Contractors and Special Conditions and Additional Special Conditions of Contract.
- 2.5. Form of Tender, submitted by the Contractor.
- 2.6. General Specifications, Common Specifications.
- 2.7. Detailed item specifications.
- 2.8. Drawing submitted with the tender and subsequently revised / modified by Consultant/Client representative.
- 2.9. Contract Bills, including all modifications thereof incorporated before execution of the agreement.
- 2.10. Letter accompanying the tender, (if any).
- 2.11. Correspondences (if any) between the parties here to after submission of the tender till completion of work and the Owners' Letter of Acceptance of the tender.
- 2.12. Letter of Acceptance of the tender (or Work Order) issued to the Contractor by the Owner.
- 2.13. Further drawings and / or instructions issued by the Consultant/ Owner from time to time relating to the Works.
- 2.14. Samples, Shop Drawings and Progress Charts referred to in clause 11 and 12 herein below.

The original Contract Document shall remain in the custody of the Owner so as to be available at all reasonable times for the inspection of the Consultant/Consultants representative or of the Contractor. Immediately after the execution of the Contract Document, one copy of the Contract Document shall be supplied to the Contractor, without any charge.

As soon as if possible after the execution of this Contract, two copies of the descriptive Schedules or other such documents necessary for use in carrying out the Work shall be supplied to the Contractor, without any charge. Provided that nothing contained in the said Specifications, Descriptive Schedules or other documents shall impose any obligations beyond those imposed by the contract document namely, the Contract Drawing, the Contract Bills, the Articles of Agreement and the General Conditions of Contract.

After the award of the Contract, the Contractor shall be supplied two copies of all such further Specifications, Drawings and details as may be prepared by the Consultant/Consultants representative /

Owner from time to time as the work proceeds and as are reasonably necessary either to explain or amplify the contract drawings or to enable the contractor to carry out and complete the work in accordance with this general conditions of contract. These Drawings/ Documents will be provided to the Contractor without any charge.

At the Site of Work, the contractor shall keep one copy of the Specifications, Drawings, Descriptive Schedules or other such documents referred to in Clauses 2.4 to 2.8 above and written instructions referred to in clause 8, 14 and 15 herein below so as to be available to the Consultant / Consultants representative / Owner or their representative/s at all reasonable times.

None of the documents mentioned here, shall be used by the Contractor for any purpose other than this Contract. Neither the Contractor nor any of his Sub-Contractor shall divulge or use any of the prices in the Contract Bills except for the purpose of this Contract.

Before the issue of Final Certificate, the Contractor, if so requested by the Consultant/Consultants representative, shall immediately return to the Consultant/Consultants representative all Drawings, Details, Specifications, Descriptive Schedules and other such documents that bear the Consultant/Consultants representative's name.

### **3. TYPE OF CONTRACT**

The Contract shall be an item rate Contract. The Contractor shall be paid for the actual quantity of work done, as measured at Site as per approved Contract Drawings at the accepted Contract Rates as provided in the Contract Bills.

### **4. SCHEDULE OF QUANTITIES**

The quantities given in the schedule of quantities are provisional and are meant to indicate the intent of the work and to provide a uniform basis for tendering. The Consultant/Consultants representative and / or the Owner, reserves the right to increase or decrease any of the quantities or to totally omit any item of work and the contractor shall not claim any extra or damages on these grounds.

The quality and quantity of work included in the Contract sum shall be deemed to be that which is set out in the Contract Bills which bills unless otherwise expressly stated in respect of any specified item, shall be deemed to have been prepared in accordance with the principles of the standard method of measurement of building works last before issued by the Indian Standard Institution but save as aforesaid nothing contained in the contract bills shall override, modify or affect in that which is contained in any of the clauses of this General Conditions of Contract.

Any error in description or in quantity or omission of items from the Contract Bills shall not vitiate this Contract but shall be treated as a 'Variation' under Clause 25 of the General Conditions of Contract.

### **5. CONTRACT DRAWINGS**

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- 5.1. In general, the Drawings shall indicate dimensions, positions and type of construction, the Specifications shall indicate the qualities and the methods and the Bill of Quantities shall indicate the quantum and the rate for each item of work. Any work indicated on the drawings, but not mentioned in the specification or vice-versa shall be furnished as though fully set forth in both. Work not specifically detailed, called for, marked or specified shall be the same as similar parts that are detailed, marked or specified.
- 5.2. The Contractor's work shall not deviate from the Drawings and the Specifications. The Consultant / Consultants representative's interpretation of these documents shall be final and without appeal. Errors or inconsistencies discovered by the Contractor in the Drawings and Specifications shall be promptly brought to the attention of the Consultant/Consultants representative through the Site Engineer/Site Manager for interpretation or correction. Local conditions, which may affect the work, shall likewise be brought to the Consultant/Consultants representatives' attention. If at any time, it is discovered that work is being done which is not in accordance with the Contract Drawings and Specifications, the Contractor shall correct the work immediately at his own cost. The Contractor shall not carry on work except with the knowledge of the Site Engineer/Site Manager.
- 5.3. The Contractor's work shall not deviate from the Drawings and the Specifications. The Consultant / Consultants representative's interpretation of these documents shall be final and without appeal. Errors or inconsistencies discovered by the Contractor in the Drawings and Specifications shall be promptly brought to the attention of the Consultant/Consultants representative through the Site Engineer/Site Manager for interpretation or correction. Local conditions, which may affect the work, shall likewise be brought to the Consultant/Consultants representatives' attention. If at any time, it is discovered that work is being done which is not in accordance with the Contract Drawings and Specifications, the Contractor shall correct the work immediately at his own cost. The Contractor shall not carry on work except with the knowledge of the Site Engineer/Site Manager.
- 5.4. Figured dimensions on the scale drawings and large size details shall take precedence over small scale drawings. Any work done before receipt of such details, if not in accordance with the same, shall be removed and replaced or adjusted by the Contractor at his own expense to the satisfaction of the Consultant/Consultants representative / Owner. This General condition shall apply with equal force to all the work including authorized extra works.
- 5.5. All Drawings, Bill of Quantities and Specifications, including copies thereof furnished to the Contractor are the property of the Consultant/Consultants representative. They shall not be used on any other work and shall be returned to the Consultant/Consultants representative and Owner on request upon completion or termination of the contract.

## 6. CONTRACT SUM

The contract sum shall not be adjusted or altered in any way whatsoever other than in accordance with the express provisions of this General Conditions of Contract and subject to clause 5.2 above, any error (whether arithmetic or otherwise) in the computation of the Contract Sum shall be deemed to have been accepted by the parties hereto.

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## 7. SCOPE AND INTENT

### Scope

The general character and the scope of work is illustrated and defined by the signed Drawings, the Specifications and the Bill of Quantities attached herewith. If the Contractor finds any discrepancy in or divergence between the Contract Drawings, Specifications and / or the Contract Bills, he shall immediately notify the Consultant/Consultants representative / Owner in writing specifying the discrepancy or divergence and the Consultant/Consultants representative / Owner shall issue instructions in this regard.

The Contractor shall carry out and complete the work in every respect in accordance with the Contract and with the directions of and to the reasonable satisfaction of the Consultant/Consultants representative / Owner. The Consultant/Consultants representative may, in his absolute discretion and from time to time issue further drawings, details and / or written instructions, written directions and written explanations all of which are collectively referred to as Consultant/ Consultants representative's Instructions. All such drawings and instructions shall be consistent with Contract Document, true developments thereof and reasonably inferable there from.

### Intent

This intension of the document is to include all labour and materials, equipment and transportation necessary for the proper execution of the work. Materials of work described in words, which so applied have a well-known technical or trade meaning, shall be held to refer to such recognized standard.

## 8. CONSULTANT/CONSULTANTS REPRESENTATIVES' INSTRUCTIONS

The Contractor shall forthwith comply with and duly execute any such works comprised in such instructions issued to him by the Consultant/Consultants representative in regard to any matter for which the Consultant/Consultants representative is expressly empowered by these conditions to issue instructions. Provided always that verbal instructions, directions and explanations given to the Contractor (or his work representative) by the Consultant/Consultants representative shall be confirmed in writing, more particularly if involving any variation.

If within seven days after receipt of a written notice from the Consultant/Consultants representative, requiring compliance with an instruction the Contractor does not comply herewith, then the Owner may employ and pay other persons to execute any work whatsoever which may be necessary to give effect to such instructions and all cost incurred with such employment shall be recoverable from the Contractor by the Owner as a debt or may be deducted by him from any monies due or to become due to the Contractor under this Contract.

Upon receipt of the instruction issued to him by the Consultant/Consultants representative, the Contractor may request the Consultant/Consultants representative to specify in writing the provision of these conditions which empowers the issue of the said instruction. The Consultant/Consultants representative shall forthwith comply with any such request and if the contractor shall thereafter comply with the said instruction, then the issue of the same shall have been deemed for all purposes of this contract.

All instructions issued by the Consultant/Consultants representative shall be in writing with copy to the Owner. Any instruction issued orally shall be with immediate effect, but shall be confirmed in writing by the Contractor to the Consultant/Consultants representative within seven days and if not dissented from in writing by the Consultant/Consultants representative to the Contractor within seven days from receipt of the Contractors' confirmation, shall take effect as from the expiration of the latter said seven days.

Provided always

That if the Consultant/Consultants representative within seven days of giving such an oral instruction shall himself confirm the same in writing, the Contractor shall not be obliged to confirm as aforesaid and the said instruction shall take effect as from the date of the Consultant/Consultants representatives' confirmation.

That if neither the Contractor nor the Consultant/Consultants representative shall confirm such an oral instruction in the manner and the time aforesaid but the Contractor shall nevertheless comply with the same, then the Consultant/Consultants representative may confirm the same in writing at any time prior to the issue of the Final Certificate and the said instruction shall thereupon be deemed to have taken effect on the date on which it was issued.

The Site Engineer/Site Manger shall maintain a register / memo book of all verbal instructions and changes issued at site.

## **9. FACILITIES AND CO-OPERATION**

In the case of works indicated on the Drawings but not included in the Contract, the Contractor shall provide necessary facilities and co-operation for any Sub-Contractor or supplier who may be approved by the Owner. The Contractor shall do all cutting, filling or patching of his work that may be required to make its several parts come together properly and fit it to receive or be received by work of other Contractors shown upon or reasonably implied by the Drawings and Specifications for the completed structure and he shall make good all such cutting, filling or patching after completion of works of other Contractors as the Consultant/Consultants representative may direct. Any cost caused by the defectively or ill-timed work shall be borne by the partly responsible. The Contractor shall not endanger any work by cutting, excavating or otherwise altering the work and shall not cut out or alter the work of any other Contractor save with the written and express Consent of the Owner / Consultant/Consultants representative.

## **10. POSSESSION**

The Contractor shall be allowed admittance to the site on the "Date of Commencement" stated in the Appendix hereto and he shall thereupon and forthwith begin the work and shall regularly proceed with and complete the same on or before the date of completion stated in the Appendix hereto subject nevertheless to the provision for extension of time hereinafter contained.

## **11. SAMPLES AND SHOP DRAWINGS**

After the award of the Contract, the Contractor shall furnish to the Site Engineer/Site Manager for the approval of the Owner / Consultant/Consultants representative with such promptness as to cause no delay in his work or in that of any other Sub-Contractor, samples and shop drawings required by the Specifications or by the Owner / Consultant/Consultants representative. Such samples shall be delivered free of cost.

The Consultant/Consultants representative shall check and approves such samples shop Drawings, with reasonable promptness only for conformity with the design concept of the works and for compliance with the information in the Contract Documents. The work shall be carried out in accordance with the approved samples and shop drawings.

## **12. PROGRESS CHART**

The Contractor shall prepare progress charts and submit the same for approval of the Consultant/Consultants representative and for his record within ten days of the award of the Contract. The charts shall indicate the "Accepted dates" of commencement and completion of each of the items of the work and shall be in a form approved by the Consultant/Consultants representative. The charts shall also indicate the scheduling of samples, shop drawings and the approvals. The charts as approved by the Consultant/Consultants representative will form part of the Contract.

## **13. ACCESS FOR OWNER / CONSULTANT/CONSULTANTS REPRESENTATIVE TO THE WORK**

The Owner / Consultant/Consultants representative and their representatives shall have access to the works and the workshops or other place of the Contractor where work is being carried out for the Contract and when work is to be so prepared in workshops or other places of a Sub-Contractor (whether or not a nominated Sub-Contractor as defined in clause 21 herein below.) at all reasonable times. The Contractor shall have a term in the Sub-Contract so as to secure a similar right of access to those workshops or placed for the Owner / Consultant/Consultants representative and his representatives and shall do all things reasonably necessary to make the right effective.

## **14. CONSULTANT/CONSULTANTS REPRESENTATIVE'S STATUS AND DECISIONS**

The Consultant/Consultants representative shall be the Owners' representative during the construction period. The Consultant/Consultants representative shall regularly visit the site to familiarize himself generally with the progress and the quality of the work and to determine in general if the work is proceeding in accordance with the Contract Document. He shall not be required to make exhaustive or continuous on site inspection to check the quality or quantity of the work and he shall not be responsible for the Contractors' failure to carry out the construction work in accordance with the Contract Document. During such visits and on the basis of his observations while at the site he shall keep the Owner informed of the progress of the work, shall endeavor to guard the Owner against defects and deficiencies in the work of the Contractor and he shall condemn work which fails to conform to the Contract Document. Consultant/Consultants representative shall have authority to act on behalf of the Owner only to the extent expressly provided in the Contract Document or otherwise in writing which shall be shown to the Contractor. He shall have authority to stop the work, whenever such stoppage may be necessary in his reasonable opinion, to ensure the proper execution of the Contract. The Consultant/Consultants

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representative shall be in the first instance the interpreter of the conditions of this contract and the judge of its performance. He shall side neither with the Owner nor with the Contractor but shall use his powers under the Contract to enforce its faithful performance by both. In case of the termination of the appointment of the Consultant/Consultants representative, the Owner shall appoint a capable and reputable Consultant/Consultants representative against whom the Contractor shall make no reasonable objection and whose status under the Contract shall be that of the former Consultant/Consultants representative. Any dispute in connection with such appointment shall be subject to Arbitration.

**Decision:**

The Consultant/Consultants representative shall within a reasonable time make decisions on all claims of the Owner or the Contractor and all other matters relating to the execution and progress of the work of the interpretation of the Contract Document. The Consultant/Consultants representative may in his absolute discretion and from time to time issue further drawings, details and / or written instructions, written directions and written explanations in regard to:

- Variation or modifications of the design.
- The quality or quantity of works or the additions or omissions or substitution of any work.
- Any discrepancy in or divergence between the drawings and / or specifications.
- The removal and / or re-examination of any works executed by the Contractor.
- The dismissal from the works of any persons employed thereon.
- The opening up for inspection of any work covered up.
- The amending and making good of any defects under defects liability period.
- The removal from the site of any material therefore.
- Assignment and sub letting.
- Delay and extension time.
- The postponement of any work to be executed under the provision of this Contract.

**Dismissal**

The Contractor shall on the request of the Owner / Consultant/Consultants representative immediately dismiss from the works any person employed thereof by him who may in the opinion of the Owner / Consultant/Consultants representatives be incompetent or misconducts himself and such person shall not be again employed on the work without the permission of the Owner / Consultant/Consultants representative.

**15. SITE ENGINEER/SITE MANAGER**

The Contractor shall afford the Site Engineer/Site Manager every facility and assistance for inspecting the works and materials and for checking and measuring time and materials. Neither Site Engineer/Site Manager nor any representative of the Consultant/Consultants representative shall have power to set out works or to revoke, alter, enlarge or relax any requirements of the Contract or to sanction any day work, additions, alterations, deviations or omissions, or any extra work whatever except in so far as such authority may be specifically conferred by a written order of the Consultant/Consultants representative / Owner.

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The Site Engineer/Site Manager or any representative of the Consultant/Consultants representative shall have power to give notice to the Contractor or to his representative of non approval of any work or materials and such work shall be suspended or the use of such materials shall be discontinued until the decision of the Consultant/Consultants representative is obtained. The works will from time to time be examined by the Consultant/Consultants representative and the Site Engineer/Site Manager or the Consultant/Consultants representative's representative but such examination shall not in any way exonerate the Contractor from the obligation to remedy any defects which may be found to exist at any stage of the works or after same is completed. Subject to the limitations of this clause the Contractor shall take instructions only from the Consultant/Consultants representative / Owner.

#### **16. CONTRACTORS' FIELD ORGANIZATION AND EQUIPMENT**

The Contractor shall constantly keep on his work during its progress one qualified and competent Works Manager acceptable to the Owner / Consultant/Consultants representative (assisted by a team of Consultant/Consultants representatives, Supervisors and Technicians) who will be responsible for the carrying out of the works to the true meaning of Drawings, Specifications, Schedule of Quantities and Consultant/Consultants representative's instructions and directions, to the satisfaction of the Owner / Consultant/Consultants representative. Any directions or instructions given to him (or to his assistants) by the Owner / Consultant/Consultants representative shall be deemed to have been issued to the Contractor. Attention of the Contractor is called to the importance of requesting instructions from the Consultant/Consultants representative before undertaking any work where Consultant/Consultants representatives' directions of instructions are required. Any such work done in advance of such instructions will be liable to be removed, at no extra cost to the Owner.

##### **Equipment:**

The contractor shall provide and install all necessary barricades, hoists, ladders, staging, scaffoldings, tools, tackles, plants, instruments, equipment etc and all transport for labour, materials and plant necessary for the proper carrying on execution, completion and maintenance of the work to the satisfaction of the Consultant/Consultants representative / Owner.

##### **Security:**

The Contractor shall make his own security arrangements to guard the site and works at all times, at his own expense. The security arrangements shall be adequate to maintain strict control on the movement of material and labour. The Contractor shall extend the security arrangements to guard the materials stores and / or fixed on the premises by the Sub-Contractors.

##### **Storage of Materials:**

The contractor shall provide, erect, maintain and remove after completion of the works, proper temporary sheds for the storage and protection of the materials etc. and also for the execution of work which may be prepared on the site.

##### **Sanitary Conveniences:**

The contractor shall provide and erect all necessary temporary sanitary convenience for the site staff and the workmen and maintain it every day all the times, clear away and deodorize the ground after removal.

**Scaffolding, Staging, Guard Rails etc.:**

The contractor shall provide all necessary temporary scaffoldings, staging, platforms, guardrails, stairs etc (with sufficiently strong and adequate supports suitable for particular situations) which shall be required during constructions. The temporary access to the various parts of the works shall be rigid and strong enough to avoid chance of mishaps. The arrangement proposed shall be subject to the approval of the Owner / Consultant/Consultants representative. (Contractor shall use MS pipe / Acrow material. Bamboos will not be accepted as scaffolding material.)

**17. TAXES:**

The contractor shall quote individual item rates separately including basic price, excise duty, sales tax, WCT & ST etc. as applicable.

**18. STATUTORY OBLIGATIONS, NOTICES, FEES AND CHARGES**

The Contractor shall comply with and give all notices required by any Government Authority and instrument, rule or order made under any Act of Parliament or any regulation or bye-law of any local authority relating to the work or with whose system the same is or will be connected. The Contractor, before making any variation from the Contract Drawings or Contract Bills necessitated by such compliance, shall give to the Owner / Consultant/Consultants representative a written notice specifying and giving reasons for such variations and the Owner / Consultant/Consultants representative may issue instructions in regard thereto. If, within ten days of having given the said written notice, the Contractor does not receive any instruction in regard to the matters therein specified, he shall proceed with the work conforming to the Act of Parliament, instrument, rule, order, regulations or bye-law in question and any variation thereby necessitated shall deemed to be a variation required by the Owner / Consultant/Consultants representative.

The contractor shall pay and indemnify the Owner against liability in respect of any fees or charges (including any rates and taxes) legally demandable under any Act of Parliament, instrument, rule or order or any regulation or bye-law or any local authority in respect of the work.

**19. ROYALTIES AND PATENT RIGHTS**

All royalties or other sums payable in respect of the supply and use in carrying out the work as desired by or referred to in the Contract Bills of any patented articles, process or inventions shall be deemed to have been included in the Contract Sum and the Contractor shall indemnify the owner from and against all claims, proceedings, damages, costs and expenses which may be brought or made against the owner or to which he may be put by reason of the contractor infringing or being held to have infringed any patent rights in relation to any such articles, processes and inventions.

**20. ASSIGNMENT OR SUB-LETTING**

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The contractor shall not assign or sub-let any part of this contract without the written consent of the Owner / Consultant/Consultants representative. Such consent shall not be unreasonably withheld by Owner / Consultant/Consultants representative to the prejudice of the Contractor.

## 21. SUB CONTRACTOR

Before awarding any Sub-Contract, the Contractor shall notify the Owner / Consultant/Consultants representative in writing the names of the sub contractors proposed for the principal parts of the work and for such other parts as the Consultant/Consultants representative may direct. Contractor shall not employ any sub-contractor to whom the Owner / Consultant/Consultants representative may have reasonable objection. The Owner / Consultant/Consultants representative, however, shall have power to obtain estimate and select other agencies to carry out any of the work as described below:

21.1 All specialists, merchants, tradesmen and others executing any works or supplying and fixing any goods who may be nominated or selected by the Owner / Consultant/Consultants representative shall be deemed to be sub contractors employed by the contractor and are to be referred as nominated sub contractors. No nominated Sub-Contractor shall be employed on or in connection with the work against whom the contractor shall make reasonable objection or (save where the owner / Consultant/Consultants representative and contractor shall otherwise agree) who will not enter into a contract providing :-

21.1.1. That the nominated Sub-Contractor shall carry out and complete the sub contract works in every respect to the reasonable satisfaction of the Contractor and of the Owner / Consultant/Consultants representative an in conformity with all the reasonable directions and requirements of the Contractor.

21.1.2. That the nominated Sub-Contractor shall observe, perform and comply with all the provisions of this contract on the part of the Contractor to be observed performed and complied with (other than clause 43 herein below) so far as they relate and apply to the sub-contract works or to any portion of the same.

21.1.3. That the nominated Sub-Contractor shall indemnify the Contractor against the same liabilities in respect of the sub contract as those for which the Contractor is liable to indemnify the Consultant/Consultants representative under this Contract.

21.1.4. That the nominated Sub-Contractor shall indemnify the Contractor against claims in respect of any negligence, omission or default of such Sub-Contractor, his servants or agents or any misuse by him or them of any scaffolding or other plant and shall insure himself against any such claims and produce the policy or policies and premium receipts as and when required by the Contractor or Consultant/Consultants representative.

21.1.5. The payment in respect of any work, materials or good comprised in the Sub-Contract shall be made within fourteen days after receipt by the contractor of the Consultant/Consultants representative's certificate under clause 26 herein below which states as due an amount calculated

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by including the total value of such work, materials or goods and shall when due be subject to the retention by the contractor of the sums mentioned in clause 21.1.7 herein below.

- 21.1.6. That the sub-contract work shall be completed within the period or (where they are to be completed in sections) periods therein specified, that the Contractor shall not without the written consent of the Owner / Consultant/Consultants representative grant any extension of time for the completion of the Sub-Contractors' work or any section thereof and that the Contractor shall inform the Owner / Consultant/Consultants representative of any representation made by the nominated Sub-Contractor as to the cause of any delay in the progress of completion of the sub contract work or of any section thereof.
- 21.1.7. That the Consultant/Consultants representative shall retain from the sum directed by the Consultant/Consultants representative having been included in the calculation of the amount as due in any certificate issued under clause 26 herein below in respect of the total value of work, materials or goods executed or supplied by the nominated sub contractor the percentage of such value named in the Appendix hereto as 'Retention Percentage' up to a total amount not exceeding a sum which bears the same ratio to the sub-contract price as the unreduced sum named in the appendix hereto as 'Limit of Retention Fund' bears to the contract sum, and that the Contractors' interest in any sums so retained (by whomsoever held) shall be fiduciary as trustee for the nominated Sub-Contractor (but without obligation to invest); that the nominated Sub- Contractors' beneficial interest in such sums shall be subject only to the right of the Contractor to have recourse thereto from time to time for payment of any amount which he is entitled under the Sub-Contract to deduct from any sum due or to become due to the nominated Sub-Contractor, they shall be paid in full if paid within fourteen days of the date fixed for their release in the Sub-Contract.
- 21.1.8. Before issuing any certificate, the Consultant/Consultants representative may request the Contractor to furnish to him reasonable proof that all amounts included in the calculation of the amount stated as due on previous certificates in respect of the total value of work materials or goods executed or supplied by any nominated Sub-Contractor have been duly discharged and if the Contractor fails to comply with request, the Consultant/Consultants representative shall issue a certificate to that effect and thereupon the Owner may himself pay such amount to any nominated Sub-Contractor concerned and deduct the same from any sums due or to become due to the Contractor.
- 21.1.9. Neither the existence nor the exercise of the foregoing powers nor anything else contained in this General Conditions of Contract shall render the owner in any way liable to any nominated Sub-Contractor.
- 21.1.10. Where the Contractor in the ordinary course of his business directly carried out works for which Prime Cost or Provisional Sums are included in the Contract Bills and the Owner / Consultant/Consultants representative is prepared to receive tenders from other Contractor for such items, then the Contractor shall be permitted to tender for the same or any of the items without prejudice to the Consultant/Consultants representatives' right to reject the lowest or any tender. If the Contractors' tender is accepted he shall not sublet the work without the written consent of the Owner / Consultant/Consultants representative.
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21.1.11. The Contractor shall allow for general attendance upon Sub-Contractors including free use of plant, scaffolding etc and is to allow them the use of sanitary conveniences, facilities for storing materials, other amenities and affording them all reasonable facilities for carrying out their contracts.

22. **PRIME COST** – Not Applicable

### **23. ARTISTS AND TRADESMEN**

23.1. The Contractor shall permit the execution of work not forming part of this contract by artists, tradesmen or others engaged by the Consultant/Consultants representative. Every such person shall for the purpose of clause 40 herein below be deemed to be a person for whom the owner is responsible and not be a Contractor.

### **24. SEPARATE CONTRACTS**

24.1. The Owner reserves the right to let other Contractors in connection with his work under similar general conditions. The Contractor shall afford other Contractors reasonable opportunity for the introduction and storage of their materials and execution of their work and shall properly connect and co-ordinate his work with theirs. If any part of the Contractors' or Sub-Contractor's work depends for proper execution or results upon the work of any other Contractor or Sub-Contractor, the Contractor shall inspect and promptly report to the Consultant/Consultants representative any defects in such work that render it unsuitable for such proper execution and results. Failure of the Contractor to so inspect and report shall constitute an acceptance of the other Contractors' works as fit and proper for the reception of his work, except as to defects which may develop in the other Contractors' or Sub-Contractor's work. After the execution of his subsequent work the Contractor shall measure work already in place and shall at once report to the Consultant/Consultants representative / Owner of any discrepancy between the executed work and the Drawings.

### **25. VARIATIONS, PROVISIONAL AND PRIME COST SUMS**

25.1. Where work cannot properly be measured and valued, the Contractor shall be allowed day work rates on the prices prevailing when such work is carried out (unless otherwise provided in the Contract Bills)

25.2. At the rates if any, inserted by the Contractor in the Contract Bills or when no such rates have been inserted, at the rates prevailing in the market for material and labour and at the control rates for the controlled materials including in all cases the rate for delivery of the material at the work.

25.3. Provided that in any case voucher specifying the time daily spent upon the work (and the workmen's names, if required by the Site Engineer/Site Manager) and the materials employed shall be delivered for verification to the Consultant/Consultants representative or his authorized representative not later than the end of the week following that in which the work has been executed.

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25.4. Effect shall be given to the measurement and valuation of Variations in Interim Certificates and by adjustment of the Contract Sum, and effect shall be given to the measurement and valuation of work for which a provisional sum is included in the Contract Bills under the said clause in Interim Certificate and by adjustment of the Contract Sum in accordance with clause 26 herein below.

## **26. CERTIFICATES AND PAYMENT**

26.1. At the 'Period of Interim Certificate' named in the Appendix hereto, the Consultant/Consultants representative shall issue a certificate stating the amount due to the Contractor from the Owner and the Contractor be entitled to payment therefore within the 'Period of Honoring Certificates' named in the appendix hereto. Interim Certificates shall be made by the Consultant/Consultants representative not more than once a month based on the 'quantities' certified by the Site Engineer / Site Manager of Work against Running Bills presented (in quadruplicate) by the Contractor.

26.2. The amount stated as due in an 'Interim Certificate' shall subject to any agreement between the parties as to stage payments, be the total value of the work properly executed and of the materials and goods delivered to or adjacent to the work for use thereon up to and including a date not more than seven days before the date of said certificates less any amount the Owner is bound to make statutory deduction towards income tax (TDS) etc. less any amount which shall be retained by the owner (as provided in clause 26.3 herein below) and less any installments previously paid under these conditions, provided that the value of the unfixed materials and goods as agreed upon included in such certificate shall only be up to (75%) of the value of the unfixed materials and goods as and from such time as they are reasonably, properly and not prematurely brought to or placed adjacent to the work and then only if adequately protected against weather or other casualties.

26.3. The amounts retained by virtue of clause 26.2 above shall be subject to the following rules:

26.3.1 The Owners' interest in any amounts so retained shall be fiduciary as Trustee for the Contractor (but without obligation to invest) and the Contractors' beneficial interest therein shall be subject only to the right of the Consultant/Consultants representative to have recourse thereto from time to time for payment of any amount which he is entitled under the provisions of this contract to deduct from any sum due or to become due to the Contractor.

26.3.2 On the issue of the Certificate of virtual completion, the Consultant/Consultants representative shall issue an Interim Certificate for one month of total amounts then so retained and the Contractor shall be entitled to payment of the said money within the 'Period of Honoring Certificate' named in the appendix hereto.

26.4. The measurement and valuation of the work shall be completed within the 'Period of Final Measurement and Valuation' stated in the appendix hereto and the Contractor shall be supplied with a copy of the priced 'Bills of Variation' not later than the end of said period and before the issue of the Final Certificate under clause 26.7 herein below.

26.5. Either before or within a reasonable time after Virtual Completion of the work, the Contractor shall send to the Consultant/Consultants representative all documents necessary for the purposes of the

computations required by these conditions including all documents relating to the accounts of nominated Sub-Contractors and Nominated Suppliers.

So soon as is practicable but before the expiration of the 'Period for issue of Final Certificate' stated in the appendix hereto or from completion of making good defects under clause 36.2 herein below or from receipt by the Consultant/Consultants representatives of the documents referred to in clause 26.5 above whichever is the latest, the Consultant/Consultants representative shall issue the Final Certificate. The Final Certificate shall state:

26.6. The sum of the amount paid to the Contractor under Interim Certificates and the amount named in the said appendix as limit of Retention Fund and

The Contract Sum adjusted as necessary in accordance with the terms of this General Conditions of Contract and the difference (if any) between the two sums shall be expressed in the said Certificate as a balance due to the Contractor from the Owner or to the Owner from the Contractor as the case may be and subject to any deductions authorized by this General Conditions of Contract, the said balance shall as from the fourteenth day after the issue of the said Certificate be a debt payable as the case may be by the Owner to the Contractor or by the Contractor to the Owner.

26.7. Unless a written request to concur in the appointment of an Arbitrator shall have been given under clause 48 herein below by either party before the Final Certificate has been issued or by the Contractor within twenty eight days after such issue, the said Certificate shall be conclusive evidence in any proceedings arising out of this Contract (whether by arbitration under clause 48 herein below or otherwise) that the works have been properly carried out and completed in accordance with the terms of this contract which require an adjustment to be made to the contract sum, except and in so far as any sum mentioned in the said certificate is erroneous by reason of :

26.7.1 Fraud, dishonesty or fraudulent concealment relating to the works, or any part thereof, or to any matter dealt with in the said certificate, or

26.7.2. Any defect (including any omission) in the works, or any part thereto which reasonable inspection or examination at any reasonable time during the carrying out of the Works or before the issue of the said Certificate would not have disclosed; or

26.7.3. Any accidental inclusion or exclusion of any work, materials, goods or figures in any computation or any arithmetical error in any computation.

Same as aforesaid no certificates of the Consultant/Consultants representative shall of itself be conclusive evidence that any works materials or goods to which it relates are in accordance with this contract.

The Contractor, before settlement of payment against Final Bill, shall sign and deliver to the Owner, either in the measurement books or otherwise, as may be required a valid released and discharge from any and all claims and demands whatsoever from the Owner for all matters arising out of this contract, except in respect of Defects Liability under clause 36.2.



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**27. CLAIM FOR EXTRA**

- 27.1. When any instruction or decision given at site involves an extra or whereby the Contractor may plan to claim an extra, it shall be the responsibility of the Contractor to inform the Owner / Consultant/Consultants representative of the extra amount and get written authorization from the Owner / Consultant/Consultants representative before proceeding with the work involved.
- 27.2. Any modification carried out for expediting or simplifying work at the request of the Contractor or his representatives shall not be taken as the basis for claiming an extra. However, if such modification shall also involve an extra, the rate for such modification shall be settled in advance and written authorization obtained by the Contractor from the Owner / Consultant/Consultants representative before proceeding with the work involved. If no such information is given by the Contractor in writing to the Owner / Consultant/Consultants representative, such modification shall not be accepted as the basis for extra charge.

**28. DEDUCTION FOR UNCORRECTED WORK**

- 28.1. If the Consultant/Consultants representative deems it inexpedient to correct work damaged or not done in accordance with the contract, an equitable deduction from the Contract Sum as may be decided by the Consultant/Consultants representative shall be made.

**29. FLUCTUATIONS**

- 29.1. The prices shall be firm and not subject to any changes and will be free from any variation till the actual completion of the project.

**30. UNFIXED GOODS AND MATERIALS**

- 30.1. Unfixed materials and goods intended for, delivered to and placed on or adjacent to the work shall not be removed except for use upon the work unless the Consultant/Consultants representative / Owner has consented in writing to such removal. Such consent shall not be unreasonably withheld by Owner / Consultant/Consultants representative. Where the value of any such materials or goods has in accordance with clause 26.2 above been considered for payment of an advance to the Contractor, such materials and goods shall become the property of the Consultant/Consultants representative, but subject to clause 42 herein below, the Contractor shall remain responsible for loss or damage to the same.

**31. MATERIAL AND WORKMANSHIP**

- 31.1. All materials and workmanship unless otherwise specified shall be as per the relevant code of IS specifications and other applicable codes and of approved type and the Contractor shall immediately remove from the work any material and / or workmanship which in the opinion of the Consultant / Consultants representatives are defective or unsuitable and shall substitute proper materials and / or workmanship at his own cost. The term approval used in connection with this contract shall mean the approval of the Owner / Consultant/Consultants representatives.

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- 31.2. The Contractor shall submit satisfactory evidence as to the kind and quality of material if required.
- 31.3. Where special makes or brands are called for they are mentioned as standard. Others of equal quality may be used provided approval is first obtained in writing from the Owner / Consultant/Consultants representatives. Unless substitutions are requested, no deviation from the specifications will be permitted. Failure to propose the substitution of any article within thirty days after the award of the Contract will be deemed sufficient cause for denial of the request for substitution.
- 31.4. The Contractor shall indicate and submit evidence in writing of those materials or articles called for in the Specification that are not obtainable for installation in the work within the time limits of the Contract. Failure to indicate the above, within thirty days after the award of the Contract, will be deemed sufficient cause for the denial of request for the extension of the Contract time.
- 31.5. All materials shall be delivered so as to ensure speedy and uninterrupted progress of the work. Such material shall be stored so as to cause no obstruction and so as to prevent overloading of any portion of the structure and the Contractor shall be entirely responsible for damage or loss by weather or other causes.
- 31.6. Within thirty days after the award of the contract the Contractor shall submit for approval of the Owner / Consultant/Consultants representatives a complete list of all materials he and his Sub-Contractors propose to use in the work of definite brand or make which differ in any respect from those specified, also the particular brand of any article where more than one is specified as a standard. He shall also list item not specifically mentioned in the specification but which are reasonably inferred and necessary for the completion of work.
- 31.7. **Inspection:** - All materials and workmanship shall be subject to inspection, examination and test by the Owner / Consultant/Consultants representatives and or / any inspecting authority of the Owner at any and all times during and / or after manufacture and / or construction. The Owner / Consultant/Consultants representatives and or any inspecting authority of the owner shall have the right to reject defective material and workmanship or require its correction. Rejected workmanship shall be satisfactorily replaced with proper material without additional charge and the Contractor shall promptly segregate and remove the rejected material from the works. If the Contractor fails to proceed at once with the replacement of rejected materials and / or the correction of the defective workmanship, the Owner shall get such work carried out on his own and charge the cost thereof to the Contractor, or may terminate the right of the Contractor to proceed further with the work.
- 31.8. The Contractor shall furnish promptly without additional charge all reasonable facilities, labour and materials necessary for the safe and convenient inspection and test that may be required by the Owner / Consultant/Consultants representatives and / or the inspecting authority of the owner. Stage-wise review of progress / expediting at Vendors' / Sub-Vendors' works shall be carried out by Purchaser / Purchaser's authorized representatives during the period of manufacture of these equipment.
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**32. DEFECTS**

32.1. The Contractor shall make good at his own cost and the satisfaction of the Consultant/Consultants representatives, all defects, shrinkages, settlements or other faults arising in the opinion of the Consultant/Consultants representatives from the work of materials not being in accordance with the drawings or specifications or schedule of quantities or the instructions of the Owner / Consultant/Consultants representative, which may appear within "Defects Liability Period" referred to in the appendix hereto shall be specified and can be amended and made good by the Contractor at his own cost unless the Owner shall decide that the amount to be paid for such amending and making good and in case of default if the incidental thereto shall be made good and borne by the Contractor and such damage, loss or expense shall be recoverable from him by the Owner or may be deducted by the Owner upon the Consultant/Consultants representatives' certificate in writing from any moneys due to the Contractor a sum to be determined by the Consultant/Consultants representatives as equivalent to the cost of amending such work and in the event of the 'Retention Amount' being insufficient, the bank guarantee submitted in lieu of cash retention will be encashed, if this amount is also insufficient, recover the balance from the Contractor together with any expenses the Owner may have incurred in connection therewith.

**33. POSSESSION OF SITE, COMPLETION, AND POSTPONEMENT**

33.1. On the "Date of Commencement" stated in the appendix hereto possession of the Site shall be given to the Contractor who shall thereupon begin the works and regularly and diligently proceed with the same and who shall complete the same on or before the "Date of Completion" stated in the appendix hereto subject nevertheless to the provisions for extension of time contained.

33.2. The Owner / Consultant/Consultants representatives may issue instructions in regard to the postponement of any work to be executed under the provisions of this Contract.

33.3. If at any time or times before Virtual Completion of the work, the Owner with the consent of the Contractor shall take possession of any part or parts of the same for his own use and / or for handing over to any other Contractor agency for carrying out, his work referred or implied elsewhere in the contract.

33.4. Such part or parts shall not be deemed to be virtually complete.

33.5. Virtual completion of such part or parts would occur on the completion of the last element of work in such part or parts under this contract.

33.6. The Contractor shall not claim that such part or parts are complete and request refund of payments in lieu thereof.

**34. EXTENSION**

34.1. Upon it becoming reasonably apparent that the progress of the work is delayed, the Contractor shall forthwith (within a maximum period of seven days) give written notice of the cause of the delay to

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the Owner / Consultant / Consultants representatives and if, in the opinion of the Consultant / Consultants representative, the completion of the work is likely to be or has been delayed beyond the "Date of completion" stated in the Appendix hereto or beyond any extended time previously fixed under this clause, by virtue of -

- 34.1.1. By force majeure, or
- 34.1.2. By reason of any exceptionally inclement weather, or
- 34.1.3. By reason of loss or damage occasioned by any one or more of the contingencies referred to in clause 37 herein below or
- 34.1.4. By reason of civil commotion, local combination of workmen strike or lockout affecting any of the trades employed upon the works or any of the traders engaged in the preparation manufacture or transportation or any of the goods or materials required for the work, Excluding the delay occurred due to the strike of the workmen employed by contractors or sub contractors or
- 34.1.5. By reason of Consultant/Consultants representative's / and or the Owner's instructions issued under clauses 24, 25 and / or 33 above or
- 34.1.6. By reason of the Contractor not having receiving in due time necessary instructions, drawings, details or levels from the Owner / Consultant/Consultants representative for which he specifically applied in writing on a date which having regard to the date of completion stated in the appendix hereto or to any extension of time then fixed under clause 35 herein was neither unreasonably distant from nor unreasonably close to the date on which it was necessary for him to receive the same, or
- 34.1.7. By delay on the part of nominated Sub-Contractors or nominated suppliers which the Contractor has taken all practicable to avoid or reduce, or
- 34.1.8. By delay on the part of artists, tradesmen or others engaged by the Owner in executing work not forming part of this contract, or
- 34.1.9. By reason of the opening up for inspection of any work covered up or of the testing of any of the works, materials or goods in accordance with clause 31 above (including making good in consequence of such opening up or testing) unless the inspection of test showed that the work materials or goods were not in accordance with this Contract, or
- 34.1.10. By reason of the Contractors' inability for reason beyond his control and which he could not reasonably have foreseen at the date of this Contract to secure such labour, goods or materials as are essential to the proper carrying out works, then the Consultant/Consultants representative shall so soon as he is able to estimate the length of the delay beyond the date or time aforesaid make in writing a fair and reasonable extension of time for completion of works, provided always that the contractor shall use constantly his best endeavors to prevent delay and shall do all that

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may reasonably be required to the satisfaction of the Owner / Consultant/Consultants representative to proceed with the work.

34.1.11. The Contractor will forfeit his claim for extension if he does not report the cause of the delay in completion date within seven days of the date of occurrence.

### **35. DAMAGES FOR NON COMPLETION**

35.1. If the Contractor fails to complete the work by the 'Date of Completion' stated in the appendix hereto or within any extended time fixed under relevant clause of this General Conditions of Contract, the Owner certifies in writing that in his opinion the work sought to have been completed, the Contractor shall pay or allow to the Owner a sum calculated at the rate stated in the appendix hereto as 'Liquidated Damages' for the period during which the said work shall so remain or have remained incomplete and the Owner may deduct such damages from any monies otherwise payable to the Contractor under this contract.

### **36. VIRTUAL COMPLETION AND DEFECTS LIABILITY PERIOD**

36.1. As soon as the works are virtually complete, the Contractor shall inform the fact to the Consultant/Consultants representative / Owner and if in the opinion of the Consultant/Consultants representative the works are practically completed, he shall forthwith issue a certificate to that effect and Virtual Completion of the Work shall be deemed for all the purpose of this contract to have taken place on the day named in such certificate.

Defect liability period shall be 1 year from the of handing over of site after successfully work completion and site clearance. The same shall be asked by contractor on beneficial occupancy of client and Consultant accordingly shall confirm the same before releasing of virtual completion certificate.

36.2. Any defects shrinkages or other faults which shall appear within the Defects Liability Period stated in the Appendix hereto and which are due to materials and workmanship not in accordance with this contract shall be specified by the Consultant/Consultants representative in a "Schedule of Defects" which he shall deliver to the Contractor not later than fourteen days after the expiration of the said Defects Liability Period and within a reasonable time after receipt of such "Schedule of Defects" the defects, shrinkages and other faults therein specified shall be made good by the Contractor and (unless the Consultant/Consultants representative shall otherwise instruct in which case the Contract Sum shall be adjusted accordingly) entirely at his own cost.

36.3. Notwithstanding Clause 36.2 above, the Owner / Consultant/Consultants representative may whenever he considers it necessary to do so, issue instructions requiring any defects, shrinkages, or other fault which shall appear within the Defects Liability Period named in the Appendix hereto and which is due to materials and workmanship not in accordance with this contract to made good and the Contractor shall within a reasonable time (which shall be specified in such instructions of the Owner / Consultant / Consultants representative) after receipt of such instructions comply with the same (and unless the Owner / Consultant / Consultants representative shall otherwise instruct in which case the Contract Sum shall be

adjusted accordingly) entirely at his own cost. Provided that, no such instruction shall be issued after fourteen days from the expiry of the said Defects Liability Period.

36.4. When in the opinion of the Consultant/Consultants representative any defects, shrinkages or other faults which he may have required to be made good under clauses 36.2 and 36.3 above shall have been made good he shall issue a certificate to that effect and completion of making good such defects, shrinkages or other faults shall be deemed for all the purposes of this contract to have taken place on the day named in such certificate.

36.5. In no case shall the Contractor be required to make good at his own cost any damages which took place before Virtual Completion of the works.

### **37. LOSS AND EXPENSE CAUSED BY DISTURBANCE OF REGULAR PROGRESS OF THE WORK**

37.1.If upon written application being made to him by the Contractor, the Owner / Consultant/Consultants representative is of the opinion that the Contractor has been involved in direct loss and / or expenses for which he would not be reimbursed by a payment made under other provision in this contract by reason of the regular progress of the works or of any part thereof having been materially affected by:

37.1.1.The Contractor not having receiving in due time necessary instructions, drawings, details of levels from the Consultant/Consultants representative for which he specially applied in writing on a date which having regard to the "Date of Completion" stated in the appendix hereto was neither unreasonably distant from nor unreasonably close to the date on which it was necessary for him to receive the same or,

37.1.2.The opening up for inspection of any work covered up or the testing of any work material or goods in accordance with relevant clause stated above (including making good in consequence of such opening up or testing) unless the inspection or test showed that the work materials or goods were not in accordance with this contract or,

37.1.3.Any discrepancy or divergence between the contract drawings, and / or the contract bills, or

37.1.4.Delay on the part of the artists, tradesmen or others engaged by the Consultant/Consultants representative in executing work not forming part of this contract, or

37.1.5.Consultant/Consultants representative's instructions issued in regard to the postponement of any work to be executed under the provisions of this contract and if the written application is made within a reasonable time of it becoming apparent that the progress of the work or of any part thereof has been affected as aforesaid,

37.2. Then the Consultant/Consultants representative shall ascertain the amount of such loss and/or expense. Any amount from time to time so ascertained shall be added to the amount which would otherwise be stated as due in such certificate.

37.3. The provisions of clause 37.1 above are without prejudice to any other rights and remedies which the Contractor may possess.

### **38. PAYMENT WITHHELD**

38.1. The Consultant/Consultants representatives may withhold or on account of subsequently discovered evidence nullify the whole or a part of any certificate to such extent as may be necessary in his reasonable opinion to protect the Owner from loss on account of:

38.1.1. Defective work not remedied.

38.1.2. Failure of the Contractor to make payments properly to Sub-Contractor or for materials or labour.

38.1.3. A reasonable doubt that the contract can be completed for the balance then unpaid.

38.1.4. Damage to another Contractor or Sub-Contractor.

38.1.5. Claims filed on reasonable evidence indicating probable filing of claims.

38.2. When the above grounds are removed, payment shall be made for amount/s withheld because of them.

### **39. INJURY TO PERSONS AND PROPERTY OF CONSULTANT/OWNER/OWNERS REPRESENTATIVE**

39.1. The Contractor shall be liable for and shall indemnify the Owner against any liability, loss, claim or proceedings whatsoever arising under any statute or at common law in respect of personal injury to or the death of any person whomsoever arising out of the works, unless due to any act or neglect of the Owner or of any person for whom the Consultant/Consultants representative is responsible.

39.2. The Contractor shall be liable for and shall indemnify the Owner against and liability, loss, claim or proceedings in respect of any injury to or damage whatsoever to any property real or personal in so far as such injury or damage arises out of or by reason of the carrying out of the works and provided always that the same is due to any negligence, omission or default of the Contractor, his servants or agents of any Sub-Contractor, his servant or agent.

### **40. INSURANCE AGAINST INJURY TO PERSONS AND PROPERTY**

40.1. Without prejudice to his liability to indemnify the Owner under clause 39 above, the Contractor shall take all the insurance (car policy with third party liability and workmen's compensation policy.) at his cost in the joint names of the Contractor and Owner and maintain until virtual completion of the works.

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- 40.1.1. Such insurances as are necessary to cover the liability of the Contractor or as the case may be of such Sub-Contractor in respect of personal injuries or deaths arising out of or in the course of or caused by the carrying out of the work; and
- 40.1.2. Such insurances as may be specifically required by the Contract Bills in respect of injury or damage to any property real or personal at site arising out of or in the course of or by any negligence, omission or default of the contractor, his servants or agents. The cost of all materials supplied by the owner shall be covered in the insurance policy.
- 40.2. The Contractor shall produce or cause any Sub-Contractor to produce for inspection the relevant policy or policies of insurance together with the receipts in respect of premiums paid under such policy or policies as and when required so to do by the Owner / Consultant/Consultants representative provided always that as and when may be reasonably required by the Owner / Consultant/Consultants representatives the production by either the Contractor or any Sub-Contractor or a current certificate of insurance from the company of firm which shall have issued the policy or policies aforesaid shall be a good discharge of the Contractors' obligation to produce or to cause the production of the policy or policies and the receipt in respect of premium paid.
- 40.3. Should the Contractor or any Sub-Contractor make default in insuring or in continuing to insure as provided in clauses 40.1.1 and 40.1.2 above or does not take the insurance policies, the Owner shall himself insure against any risk with respect to which the default shall have occurred and may deduct a sum equivalent to the amount paid in respect of the premium from any monies due to or become due to the Contractor.

#### **41 INSURANCE OF THE WORKS AGAINST FIRE ETC.**

- 41.1. The Contractor at his cost shall in joint names of the Owner and Contractor insure against loss or damage by fire, storm, lightning, flood, earthquake, aircraft or anything dropped their form, aerial objects, riot and civil commotion for the full value thereof all works executed and all unfixed materials and goods intended for, delivered to and placed on or adjacent to the work, including the cost of all materials supplied by the Owner for the work which is in the custody of the Contractor, but excluding temporary building plant, tools and equipment owned or hired by the Contractor or any Sub-Contractor and shall keep such work materials and goods so incurred until virtual completion of the work. Such insurances shall be with insures approved by the Owner / Consultant/Consultants representative and the Contractor shall deposit with the Owner / Consultant/Consultants representative the policy or policies and the receipts in respect of insuring or continuing to insure as aforesaid the Owner may himself insure against any risk with respect of which the default shall have occurred and deduct a sum equivalent to the amount paid by him in respect of premium from any monies due to or to become due to the Contractor. Provided always that if the Contractor shall independently of his obligations under this contract intern a policy of insurance which covers (inter alia) the said work, materials, and goods against the aforesaid contingencies to the full value thereof then the maintenance by the Contractor of such policy shall if the Owners' interest is endorsed thereon, be a discharge of the Contractors' obligation to insure in the joint names of the Owner and the production by the Contractor as and when may reasonably be required by the Owner / Consultant/Consultants representative of a current certificate of insurance from the company or firm which shall have issued the said policy shall be discharge of the Contractor's obligation to deposit



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with the Owner / Consultant/Consultants representative a policy or policies and the receipts in respect of premium paid.

41.2. Upon settlement of any claim by the insurance companies under the insurance aforesaid, the Contractor with due diligence shall restore work damaged, replace or repair unfixed materials or goods which have been destroyed or injure, remove or dispose off any debris and proceed with carrying out and completion of work. All monies received from such insurance shall be paid to the Contractor by installment under certificates of the Consultant/Consultants representative issued at the 'Period of Interim Certificates' named in appendix hereto. The Contractor shall not be entitled to payment in respect of the restoration of work damaged, the replacement and repair of any unfixed materials or goods and the removal and disposal of debris other than the monies received under the said insurance.

#### **42. DETERMINATION BY THE OWNER**

42.1. Default: If the Contractor shall make default in any one or more of the following respect, that is to say:

42.1.1. If he without reasonable cause wholly suspends the carrying out of the work before completion thereof, or

42.1.2. If he fails to proceed regularly and diligently with the works, or

42.1.3. If he refuses or persistently neglects to comply with a written notice from the Owner / Consultant/Consultants representative requiring him to remove defective work or improper materials or goods and by such refusal or neglect the work is materially affected , or

42.1.4. If he fails to comply with the provision of clauses above, then the Owner / Consultant/Consultants representative may given him a notice by registered post or recorded delivery specifying the default, if the Contractor either shall continue such a default for fourteen days after receipt of such a notice and shall at any time thereafter repeat such a default (whether previously repeated or not), then the Consultant/Consultants representative without prejudice to any other rights or remedies may within ten days after such continuance or repetition of notice by registered post or recorded delivery forthwith determine the employment of the Contractor under this contract, provided that such notice shall not be given unreasonably.

#### **42.2. Bankruptcy of Contractor:**

42.2.1. In the event of the Contractor becoming bankrupt or making a composition or arrangement with his creditors or being a company having a winding up order made or (except for purpose of reconstruction) a resolution for voluntary winding up passed or a receiver or manager of his business or undertaking duly appointed or secured by a floating charge, of any property comprised in or subject the floating charge, the employment of the Contractor under this contract shall forthwith automatically determined but the said employment may be reinstated and continued if

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the Consultant/Consultants representative and the Contractor, his Trustee in bankruptcy, liquidator, receiver or manager, as the case may be shall so agree.

**42.3.fraudulence practice:**

42.3.1. The Owner shall be entitled to determine the employment of the Contractor under this contract, if the Contractor shall have offered or given or agreed to give to any person and gift or consideration of any kind as an inducement or reward for doing or forbearing to do or for having done or forborne to do any action in relation to the obtaining or execution of this contract with the Owner or, for showing or forbearing to show favor or disfavor to any person relating to this contract or any other contract with the Owner, or if the like acts shall have been done by any person employed by the Contractor or acting on his behalf (whether with or without the knowledge of the Contractor), or if in relation to this Contractor or any person employed by him or acting on his behalf shall have committed any offence under the Prevention of Corruption Act, or shall have given any fee or reward the receipt of which is an offence under the Local Government Act.

**42.4.rights and duties of the Owner and Contractor:**

42.4.1. In the event of the employment of the Contractor, being determined as aforesaid and so long as it has been reinstated and continued, the following shall be the respective rights and duties of the Owner and Contractor:

- A) The Owner may employ and pay other persons to carry out and complete the works and he or they may enter upon the works and use all temporary building plant, machinery, appliances, goods and materials intended for delivered to and placed on or adjacent to the works and may purchase all materials and goods necessary for the carrying out and completion of the works.
- B) The Contractor shall if so required by the Owner or Consultant/Consultants representative within fourteen days of the date of determination assign to the Owner without payment the benefit of any agreement for the supply of materials or goods and / or for the execution of any works for the purposes of this contract but on the terms that a supplier or Sub-Contractor shall be entitled to make any reasonable objection to any further assignment thereof by the Owner. In case the Owner may pay any supplier or Sub-Contractor shall be entitled to make any reasonable objection to any further assignment thereof by the owner. In any case the Owner may pay any supplier or Sub-Contractor for any materials or goods delivered or works executed for the purpose of the contract (whether before or after the date of determination), in so far as the price thereof has not already been paid by the Contractor. The Owner's rights under this clause are in addition to his rights to pay nominated Sub-Contractors as provided in relevant clause above and payments made under this clause may be deducted from any sum due or to become due to the Contractor.
- C) The Contractor shall as and when required in writing by the Owner / Consultant/Consultants representative so to do (but not before) remove from the works any temporary buildings, plant, tool equipments, goods and materials belonging to or hired by him. If within a reasonable time after any such requirements has been made the Contractor has not complied therewith, then the

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owner may (but without being responsible for any loss or damage) remove and sell any such property of the Contractor, holding the proceeds less all costs incurred to the credit of the Contractor.

- D) The Contractor shall allow or pay to the Owner in the manner hereinafter appearing the amount of any direct loss and / or damage caused to the owner by the determination. Until after completion of the works under clause 36 above, the Consultant/Consultants representative shall not be bound by any provisions of this Contractor to make any further payment to the Contractor, but upon completion and the verification within a reasonable time of the accounts therefore the Owner / Consultant/Consultants representatives shall certify the amount of any direct loss and/ or damage caused to the Owner by the determination and if such amounts when added to the monies paid to the Contractor before the date of determination exceed the total amount which would have been payable on due completion in accordance with this contract, the difference shall be debt payable to the Consultant/Consultants representative by the Contractor and if the said amount when added to the said monies be less than the said total amount, the difference shall be a debt payable by the Owner to the Contractor.

### **43. DETERMINATION BY THE CONTRACTOR**

43.1. Subject to other provisions contained in this clause, the Consultant/Consultants representative / Owner may, without prejudice to any other rights and remedies against the contractor which the Contractor may possess, if:

- 43.1.1. The Owner does not pay to the Contractor the amount due on any certificate within the 'Period of Honoring Certificates', named in the appendix hereto and continues such default for seven days after receipt by registered post or recorded delivery of a notice from the Contractor stating that notice of determination under this condition will be served if payment is not made within seven days from receipt thereof; or
- 43.1.2. The Owner interferes with or obstructs the issue of any certificate due under this contract; or
- 43.1.3. The carrying out of the whole or substantially the whole of the uncompleted works (other than the execution of work required under clause above is suspended for a continuous period of the length by reason of:
- A) Force Majeure, or
  - B) Loss or damage occasioned by any one or more of the contingencies referred to on clause above; or
  - C) Civil commotion; or
  - D) Consultant/Consultants representatives instructions issued under this contract
- 43.1.4. The Contractor not having received in due time necessary instructions, drawings, details or levels from the Consultant/Consultants representative for which he specifically applied in writing on a date which having regard to the "Date of Completion" stated in the appendix hereto or to any extension of time then fixed under clause above was neither unreasonably

distant form nor unreasonably close to the date on which it was necessary for him to receive the same, or

43.1.5. Delay on the part of Artists, Tradesmen or others engaged by the Consultant/Consultants representative in executing work not forming part of this contract, or

43.1.6. The opening up for inspection of any work covered up or of the testing of any of the work, materials or goods in accordance with clause above (including making good in consequence of such opening up or testing.)

43.2. Then the Contractor may thereupon by notice by registered post or recorded delivery to the Owner or Consultant/Consultants representative forthwith determine his employment under this contract provided that such notice shall not be given unreasonably.

43.3. Upon determination, then without prejudice to the accrued rights or remedies of either party or to any liability of the classes mentioned in clause above which may accrue either before the Contractor or any Sub-Contractors shall have removed his or their temporary buildings, plant, machinery, appliances, goods or material or by reason of his or their so removing the same the respective rights and liabilities of the Contractor and the Owner shall be as follows that is to say:

43.3.1. The Contractor shall with all reasonable dispatch and in such manner and with such precautions, as will prevent injury, death or damage of the classes in respect for which before the date of determination he was liable to indemnify the Owner under relevant clause above, remove from site all his temporary buildings, plant, machinery, appliances, goods and materials and shall give facilities for his Sub-Contractors to do the same but subject always to the provisions of sub clause herein below.

A) After taking into account amounts previously paid under this contract the Contractor shall be paid by the Owner:

- i. The total value of the works completed at the date of determination.
- ii. The total value of work begins and executed but not completed at the date of determination the value being ascertained mutually in accordance with clause above.
- iii. The cost of materials or goods properly ordered for the works for which the Contractor shall have paid or of which the Contractor is legally bound to pay and on such payment by the Owner materials or goods so paid for shall become the property of the Owner.
- iv. The reasonable cost of the removal under clause above.
- v. Any direct loss and / or damage caused to the Contractor by the determination.

43.4. Provided that in addition to all other remedies the Contractor upon such determination may take possession which may have become the property of the Owner under clause above until payment of all monies due to the Contractor from the Owner.

#### **44. CO-ORDINATION OF WORK**

44.1. At the commencement of work, and from time to time, the Contractor shall confer with the Sub-Contractors, persons engaged on separate contracts in connection with the work and with the Consultant/Consultants representative for the purpose of the co-ordination and execution of the various phases of the work.

44.2. The Contractor shall ascertain the Sub-Contractors, persons engaged on separate contracts in connection with the works, the extend of all chasing, cutting and forming of all openings, holes, grooves etc as may be required to accommodate the various services, the routes of all services and the positions of all floor outlets, traps etc in connection with the installation of plant and services and arrange for the construction work accordingly. The breaking and cutting of completed work must be avoided.

#### **45. LABOUR**

45.1. The Contractor shall not employ child labour at site. No labour shall reside within the compound except authorized guards. All statutory clearance like labour licenses with all local statutory compliances will be obtained by the Contractor within fifteen days of LOI and submitted to the Owner / Consultant/Consultants representative failing which commercial implications against the same will be deducted from first RA bill.

#### **46. GUARANTEE**

- 46.1. Besides guarantees required elsewhere, the Contractor shall guarantee the work in general for one year as noted under respective clauses above.
- 46.2. All required guarantees shall be submitted to the Consultant/Consultants representative by the Contractor when requesting certification of accounts for payment by the Consultant/Consultants representative.

#### **47. ANTIQUITIES**

47.1. All fossils and other objects of interest or value which may be found on the site or in excavating the same during the progress of the work shall become the property of the Owner. The Contractor shall carefully take out and preserve all such objects and shall immediately or as soon as conveniently may be after the discovery of such articles deliver the same into the possession of the Consultant/Consultants representative or of the Site Engineer/Site Manager uncleaned and as excavated.

#### **48. ARBITRATOR**

48.1. All dispute and differences of any kind whatever arising out of or in connection with the contract or the carrying out of the works (whether during the progress of the works or after their completion and whether before or after the determination, abandonment or breach of the contract) shall be referred to and settled by the Consultant/Consultants representative who shall state his decision in writing. Such decision may be in the form of a Final Certificate or otherwise. The decision of the Consultant/Consultants representative with respect of any of the excepted

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matters (referred to under clause hereinabove) shall be final and without appeal, but if either the Consultant/Consultants representative or the Contractor be dissatisfied with the decision of the Consultant/Consultants representative on any matter, question or dispute of any kind (except any of the Expected Matters) or as to the withholding by the Consultant/Consultants representative or any certificate to which the Contractor may claim to be entitled then and in any such case either party (the Owner) or the Contractor may within 28 (Twenty Eight) days after receiving notice of such decision give a written notice to the other party through the Consultant/Consultants representative requiring that such matters in dispute be arbitrated upon.

- 48.2. Such written notice shall specify the matters which are in dispute and such dispute or difference of which such written notice has been given and no other shall be and is hereby referred to the Arbitration and final decision of a single arbitrator being Fellow of the Indian institute of Consultants. Contractor and the Consultant/Consultants representative / Owner should agree upon single Arbitrator to be appointed. In case of disagreement as to the appointment of a single arbitrator, Arbitration will be done by a panel of two arbitrators, both being fellows of the Indian institute of Consultants one to be appointed by each party, which arbitrators shall before taking upon themselves the burden of reference to appoint an umpire.
- 48.3. The Arbitrator, the arbitrators or the Umpire as the case may be shall have power to open up, review and revise any certificate, opinion, decision, requisition or notice save in regard to the Excepted Matters (referred to in clause hereinabove) and to determine all matters in dispute which shall be submitted to him or them and of which notice shall have been given as aforesaid.
- 48.4. Upon every or any such reference the cost of and incidental to the reference and award respectively shall be to the direction of the arbitrator or arbitrators, or the umpire as the case may be shall be final and binding on the parties. Such reference except as to the withholding by the Consultant/Consultants representative of any certificate under clause hereinabove to which the Contractor claims to be entitled shall not be opened or entered upon until after the completion of alleged completion of the works or until after the practical cessation of the works arising from any cause unless with the written consent of the Owner and the Contractor. Provided always that the Owner shall not withhold the payment of an Interim Certificate nor the Contractor except with the consent in writing of the Consultant/Consultants representative in any delay the carrying out of the works by reason of any such matters, question or dispute being referred to Arbitration but shall proceed with the work with all due diligence and shall until the decision of the Arbitrator or arbitrators or the Umpire as the case may be given abide by the decision of the Consultant/Consultants representative and no award of the arbitration or the arbitrators or the umpire as the case may be shall relieve the Contractor of his obligations to adhere strictly to the Consultant/Consultants representative's / Owner's instructions with regard to the actual carrying out of the works. The Owner and the Contractor hereby also agree that Arbitration under this clause shall be a condition precedent to any right of action under the contract.

#### **49. PROTECTION AND CLEANING**

- 49.1. The Contractor shall protect and preserve the work from all damage or accident providing any temporary cover or protection as required by the Consultant/Consultants representative. This protection shall be provided for all property adjacent to the site as well as on the site.
- 49.2. The Contractor shall properly clean the work as it progresses and shall remove all rubbish and debris from the site from time to time as is necessary and as directed. On completion, the Contractor shall ensure that the premises and / or site are cleaned, surplus materials debris, sheds etc removed, areas under floors cleared of rubbish, gutters and drains cleared, doors and sashes eased, locks and fastening oiled, keys clearly labeled and handed over to the Site Engineer/Site Manager so that the whole is left fit for immediate occupation or use and to the satisfaction of the Owner / Consultant/Consultants representative.
- 49.3. All such debris & disposals shall be carried away and disposal offs such that no complaints from Govt. authorities, general public are raised.
- 49.4. Contractor shall submit the identity to the client /Consultant, of a person from his staff to whom this housekeeping, final cleaning & handover duties are assigned.

## **50. TOLERANCE**

- 50.1. The Contractor shall exercise every care to ensure that all structural matters are sufficiently plumb and true to dimensions called for on the Drawings to receive prefabricated finishing elements such as doors, windows, cabinet work, ceramic work, concrete, tiles etc. Any variations may require rectification in the structural members or may involve remaking or replacing the finishing elements, fabricated to fit into the openings or spaces, as called for on the Drawings.
- 50.2. In case of separate contract, the Contractor whose work does not conform to dimensions called for shall be liable for all the expenses which may have to be incurred for rectification or replacement as may be required by the Consultant/Consultants representative for the proper installation of the finishing elements. The Consultant/Consultants representatives' decision in this respect shall be final and binding on the parties concerned.

**SPECIAL CONDITIONS  
OF  
CONTRACT**



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## PART 4 A

### SPECIAL CONDITIONS OF CONTRACT (SCC)

Unless otherwise agreed, these conditions shall be reading in conjunction with relevant clauses of General Conditions of Contract works involving General construction and Erection (GCC, hereinafter). In case of variance / discrepancies between SCC and GCC, the conditions laid down in SCC shall take precedence. Further in case of variance / discrepancies between SCC and Contract Documents, the latter shall prevail.

1. **Mobilization advance:** No advance payment will be made.
2. **Earnest Money Deposit (EMD):** 2% of estimated Cost (Round off)(Rupees Only) By Demand Draft, drawn from any Nationalized Or Scheduled Banks in India payable at Pune in favor Of The Director, IITM (or) By Irrevocable Bank Guarantee from any Nationalized or Scheduled Banks in India. E.M.D. of successful bidder will be adjusted towards performance security after issue of LOI. EMD of unsuccessful bidder will be returned within 30 days after award of work to successful bidder.
3. **Performance Security**  
Within 7 days of receipt of the Letter of Acceptance, the successful Bidder shall Submit the performance security of 5% of order value in the form of DD/BG drawn on any nationalized deliver to the Employer a Performance Security in any of the forms Demand draft/Bank Guarantee, from nationalized / scheduled bank located in India in favour of **DIRECTOR, INDIAN INSTITUTE OF TROPICAL METEOROLOGY, DR.HOMI BHABA ROAD, PASHAN, PUNE-411008** which will be released on successful completion of work
4. **Retention Money:**  
5% of value of total work done which will be released after defect liability period of twelve month from the date of handover of site with clearance of institute.
5. **Extra Items :** The rate of extra items shall be worked out in accordance with the following rules.
  - a. The rates for the extra items shall be derived from the rate of an appropriate item of the similar class for which the rate has already been accepted, where same can be directly derived.
  - b. The contractor shall be bound to carry out any extra items of work as per site requirement. The rate for extra items shall be derived from the rate already quoted. Where the items are not specified in the BOQ the rate shall be worked out at cost of material+labour+ Taxes +10% overheads, wastage and transportation & profit.
  - c. Wherever applicable the basic rate difference in materials (mentioned in tender) shall be payable plus-minus without any profits, overheads etc., on said rate difference.
  - d. Variation and Non- Tendered items, if any, shall be carried out under specific

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written instruction by Consultants and prior sanction by the Institute. Sanction for all extra items shall be sought by the contractor within seven days from the occurrence such necessity.

**6. Running Account Bills (RA Bills)**

The Contractor shall submit one running account bill; value of the same should not be less than RS. -25 Lakhs. 5% (Five percent) of the value of work done will be deducted from each running account bill of contractor. Payments against running bills shall be considered as running account payment and shall be considered as an advance towards final settlement of accounts with the Contractor and not as payment for the work completed and certified.

**7. Final Bill:**

The final measurements of all structures shall be submitted to the Consultant/Customers representative within seven days from the completion of each structure. The final bill along with the measurements duly certified by the Consultant/Customers representative shall be produced within thirty days from the completion of all works within the scope of work and its' handing over. No claims shall be entertained after receipt of final bill.

The final bill shall be paid within 21 days from the date of submission of final bill subject to the following:

- i) Reconciliation of free issue of material approved by site in charge.
- ii) Clearance of all temporary structure erected during construction.
- iii) 5% of value of total work done will be retained which will be released after defect liability period of twelve month from the date of handover of site with clearance of institute.

**8. VALIDITY OF RATES (VARIATION IN QUANTITIES)**

The contract rates shall remain valid and firm for variation to any extent in individual quantities of items of work. However, variation will be allowed if the final total contract value varies by (+ or -) 10% with respect to total initial L.O.I. / work order value. [Note: For variation in quantities beyond tender/BOQ a prior approval of competent authority of IITM to be obtained.]

**6. Penalty Clause:**

If the work is not completed within the aforesaid period the contractor shall pay liquidated damage of 1% per week subject to a maximum 10% of value of work order in case of delays beyond the accepted completion period for reasons solely attributed to him.

**6a. Bonus clause:** No any amount will be released on account of bonus after completion of project before time.

#### **4. SITE FACILITIES**

4.1 Water required for construction can be used from the available source within the IITM PREMISES. In case of scarcity of water Institute is not bound to provide the same and contractor has to make his own arrangement.

4.2 Electricity required for Construction work and for labour hutment shall be arranged by the Contractor at construction site at his own cost. No compensation of any sorts for non availability related to water and electrical supply in terms of extension of time as well as in terms of cost will be paid to contractor.

4.3. No space for temporary labour colony shall be allowed within the premises of the plot. Unless specifically agreed by the Owner upon written request to that effect given by the contractor. Contractor shall make his own arrangement for accommodation of their workers and staff elsewhere at no extra cost to Owner.

4.4 **Contractor should quote their item rates, considering basic rate of materials as per prevailing market rates.**

#### **5. COMMENCEMENT TIME**

The contractor shall be given possession of the site for work when the engineer notifies him that the owner is ready to do so. Such possession shall not be exclusive to the contractor and the contractor shall in accordance with the requirement of the engineer / owner afford all reasonable opportunities to any other agencies employed by the owner and their workmen for carrying out their work and to the workmen of the owner and of any other duly constituted agencies who may be employed in the execution on or near the site of any work not included in the contract or of any contract which the owner may enter into in connection with or ancillary to the works.

The Contractor shall commence the works on site within 10 (ten) days on receipt of letter of intent from the Owner and shall proceed with the same with due expedition and without delay except as may be expressly sanctioned or ordered by the Consultant/Customers representative / Owner or be wholly beyond the Contractors' control. In case where the complete site is not possible to be handed over the Contractor, the Consultant/Customers representative / Owner will ensure that enough portion of the area is handed over for the Contractor to carry out the work as stipulated in the agreement program.

#### **6. TIME SCHEDULE AND TENTATIVE CONSTRUCTION PROGRAMME**

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The Contractor shall mobilize adequate number of plant and machinery to complete the work as shown in construction program. It will be deemed that Contractor has allowed for mobilization of this plant and machinery including spares to replace in case of break down in his quoted rates and any extra resource mobilization required to achieve the program, quantity remaining same, will not be paid for.

The Contractor shall complete the work as per construction program and shall make necessary lighting arrangements to facilitate working during night. Contractors' quoted rates shall cover working on three shifts basis as mentioned herein. No extra claim shall be entertained on this account.

A total of 30 **days** shall be allowed to complete the job from the date of handing over of site to start the work. The timeline shall be divided on job to job basis also. Contractor shall draw out a tentative schedule and submit along with their offer.

## **7. ALTERATIONS IN SPECIFICATIONS AND DESIGNS**

During the execution of the work, the Consultant/Customers representative / Owner may desire to make some alterations in specifications and design, for example, use of deformed (TOR steel) reinforcement in place of mild steel reinforcement in particular RCC work. The Contractor shall carry out such changes as per written instruction of Consultant/Customers representative. There should not be extra cost to the Owner.

Cost implication for specification changes for supply items should be negotiated as per clause "Extra items".

No extra claims whatsoever shall be entertained on any account.

The Owner will inform to the Contractor, after Contractor starts site mobilization, the name and designation of the person who is authorized to accept and approve alterations / changes / modifications if they shall affect any of the terms and conditions including unit item rates, completion period stipulated in the contract, increase in quantity of contract works indicated in the contract, finalization of rates of extra items and such other issues. The Contractor shall implement any such change / alteration / modification only after the Contractor has received approval in writing from Owners' such authorized person.

## **9. COMPLETION**

9.1 Virtual Completion Certificate: Consultant/Customers representative shall issue a Virtual Completion Certificate to the Contractor after he complies following:

9.1.1 Having obtained a written request from Contractor for issuing virtual completion certificate with an undertaking to finish any outstanding work within next one month or lesser period.

9.1.2 Completed work has passed final tests as prescribed in the contract, if any.

## **10. COMPLETION CERTIFICATE**

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Consultant/Customers representative shall issue to the Contractor a Completion Certificate of works after following conditions have been complied with:

10.1 Having obtained a written request from contractor for issuing completion certificate after fulfilling his obligations stated in below.

1) Contractor has completed all the balance contract works in all respects including rectification of any defects etc. within fifteen days or less as stipulated by the Owner from the date of issue of virtual completion certificate.

3) The executed contract works have been measured jointly by the Consultant /Customers representative and Contractor assuming that these measurements shall be binding and conclusive.

4) All the temporary works, labour and staff colony etc constructed by the Contractor are removed and the work site cleaned to the satisfaction of Consultant/Customers representative / Owner.

5) Material reconciliation if any for materials issued by Owner has been completed including return of surplus / scrap material to the Owner by the Contractor.

6) Preparation of as built sketches for areas where revisions have been made completed by the Contractor. The sketches shall be clear so as to enable the Consultant/Customers representative for preparation of "As Built" drawings.

7) Accounts with other Contractors have been settled by the Contractor and Owner has been indemnified by the Contractor against all claims for any cause whatsoever.

8) Performance Bank guarantee for the defects liability period has been submitted by the Contractor.

**Defects liability period / maintenance period shall commence from the date of issue of this certificate.**

**Warranty and defect liability:** In addition to terms mentioned in tender documents following terms will be applicable for manufacturing/hidden defects and supply of defective or wrong material:

\*Road & Civil Construction workmanship: 1 years from the date of Hand over and Acceptance Phase.

**Final Completion Certificate:**

The final completion certificate shall be given by the Consultant/Customers representative/Owner two weeks after the expiry of the defect liability period / maintenance period considering the following:

The contract works have been duly maintained by the Contractor during monsoon or such period. Any defects observed have been rectified to the satisfaction of the Owner.

Obligations if any to be performed as per the contract.

Notwithstanding the issue of the final completion certificate, the Contractor and the owner shall remain liable for the fulfillment of any obligation incurred under provisions of the contract prior to the issue of the final completion certificate which remains unperformed at the time such certificate is issued and the purpose of determining the nature and extent of any such obligations, the contract shall be deemed to remain in force between the parties hereto.

#### **11. SUBSTANDARD WORK**

In case when quality of work / performance is not in accordance with Contract and which Owner / Consultant/Customers representative deem it inexpedient to correct and accepts it under special circumstances, Owner reserve the right to make an equitable deduction from contract price based on unit - item rates.

#### **12. WORK DURING MONSOON**

12.1 Contractor shall provide suitable covered shed to carry out structural fabrication work as per agreed schedule during monsoon at no extra cost to Owner.

12.2 During monsoon and other periods, it shall be the responsibility of the Contractor to keep the construction work free from water at his own cost.

#### **13. FORCE MAJEURE**

13.1 The terms and conditions mutually agreed in respect of this contract shall be subject to "Force Majeure". Neither party shall be considered in default in the performance of its obligations hereunder, if such performance is prevented or delayed because of war, hostilities, revolution, civil commotion, epidemic, accident, fire, wind, flood or because of any law and order proclamation regulation, ordinance of any government or any other case whether of a similar or dissimilar nature beyond the reasonable control of the party affected.

13.2 Exclusion from Force Majeure condition – labour strike of Contractors' workers.

13.3 Should one or both the parties be prevented from fulfilling their obligations by a state of Force Majeure continuously for a period of two months, the two parties should consult with each other regarding the future implementation of the contract.

#### **14. ARBITRATION:**

14.1 If the Contractor believes that a decision taken by the Engineer /Consultant was either outside the authority given to the them by the Contract or that the decision was wrongly taken, the decision shall be referred to the Adjudicator within 14 days of the notification of the Engineer's / consultant's decision.

##### **Procedure:**

The Adjudicator shall give a decision in writing within 28 days of receipt of a notification of a dispute.

The Adjudicator shall be paid daily at the rate specified in the Contract Data together with reimbursable expenses of the types specified in the Contract Data and the cost shall be divided equally between the Employer and the Contractor, whatever decision is reached by the Adjudicator. Either party may refer a decision of the Adjudicator to an Arbitrator within 28 days of the Adjudicator's written decision. If neither party refers the dispute to arbitration within the above 28 days, the Adjudicator's decision will be final and binding.

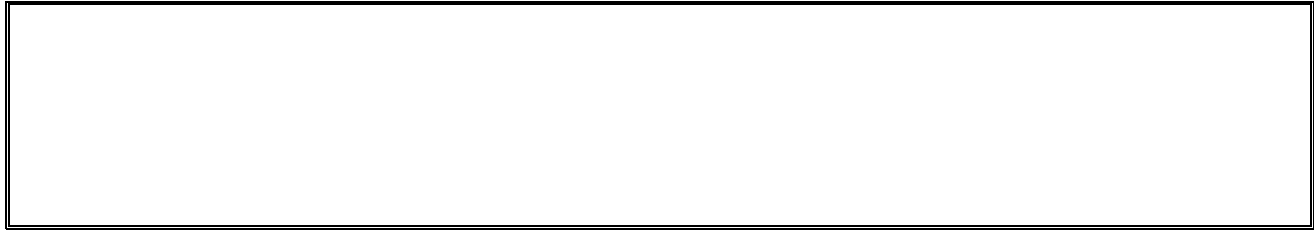
The arbitration shall be conducted in accordance with the arbitration procedure stated will be final and binding. in the Special Conditions of Contract in page 21.

**Replacement of Adjudicator**

Should the Adjudicator resign or die, or should the Employer and the Contractor agree that the Adjudicator is not fulfilling his functions in accordance with the provisions of the Contract, a new Adjudicator will be jointly appointed by the Employer and the Contractor. In case of disagreement between the Employer and the Contractor, within 30 days, the Adjudicator shall be designated by the Appointing Authority designated in the Contract Data at the request of either party, within 14 days of receipt of such request.

**ADDITIONAL  
SPECIAL CONDITIONS  
OF  
CONTRACT**





## PART 4 B

### ADDITIONAL SPECIAL CONDITIONS OF CONTRACT (SCC)

#### 1. TEST FOR MATERIALS AND WORKMANSHIP

All materials and workmanship shall be subject to such tests as stipulated in the contract or as suggested by the Consultant/Customers representative / Owner's representative. Contractor shall on advice of Owner / Consultant/Customers representative shall conduct such tests at his own expense and establish quality strength and specifications of the material / workmanship.

#### 2. UNCOVERING OF WORK

The Contractor shall uncover any part of the works or make openings in or through them as per the instructions of Consultant/Customers representative / Owner in case of doubt about the quality of material or workmanship, and shall afterwards reinstate and make them good. The Contractor shall bear all such expenses unless the need for this was on account of Owners' default. In case later case, the Owner shall bear the expenses.

#### 3. CONTRACTOR'S ARRANGEMENT FOR WORK

3.1 The Contractor shall arrange for fabrication, cutting, drilling, welding, assembling, bolting, filling, fixing, aligning etc as required for the contract work of construction, erection, testing or any other site work.

The contractor shall supply / arrange all the materials necessary for carrying out contract works, such as tools, tackles, equipment, plants, welding machines, compressors, drilling machines, cranes, hoists, lifting tackles, ropes, pulleys, packing shim hydraulic pumps, jacks etc, and also other consumables such as welding rods, brazing rods, fluxes, solders, gases, coal, fuel oils, kerosene, cotton waste, etc complete. **All lifting tools, tackles must be in good conditions and identified by sign and identification mark with rates test certificates from competent authorities.**

The Contractor shall co-ordinate and arrange for the inspection / approval by statutory authorities of the contract works carried out by him for the purpose of compliance with the necessary regulations issued by the statutory authorities.

The Contractor shall arrange for protecting properly all site work carried out by him from damage, pilferage and becoming dangerous to life and property.

The Contractor shall comply with all the work rules and safety regulations issued by the owner and the statutory authorities, which may be necessary during execution of the contract work.

All plant, equipment and materials used by the Contractor shall be safe and comply with statutory regulations, work rules and safety rules and the contractor shall be liable for any loss or damage arising from their use.

#### **4. TRANSFER OF PROPERTY**

The contract works shall become the property of the Owner upon acceptance of delivery. The Contractor shall mark all such materials as the property of the owner but it shall be at the Contractors' risk until delivered and finally accepted by the owner on virtual completion of the work.

Wherever earthwork / excavation to be undertaken, original ground levels at 5m grid shall be taken and jointly signed by the Contractor, and representative of the owner. The payment on the item earthwork or filling will be worked out with reference to these original levels.

The execution of the work shall be in strict adherence to the planned sequence of work and time schedule or instructions by the representative of Owner.

#### **5. REQUEST BY OWNER FOR SLOWING DOWN THE WORK**

If for any reason, the progress of the contract works is slowed down due to Owners' explicit requirement, the Contractor shall be entitled to proportionate extension of the completion time.

#### **6. ORDER BOOK**

The Contractor shall maintain an Order Book at site of the work. Any special orders and instructions to be issued to the Contractor at site will be recorded in this book which will be numbered and initialed by the representative of the Owner. The Contractor will however sign all orders as a token of his having seen and noted.

**7. PAYMENT:** All payments shall be made in Indian currency.

#### **8. COST VARIATION**

8.1 The Bill of Quantities included in the contract documents is provisional and approximate and liable to variation without entitling the Contractor to any compensation.

#### **9. SPECIFICATIONS**

Those items for which detailed specifications have not been included in the contract document shall be executed as per relevant IS / BS/ CPWD specifications or as per the standard construction practices and / or as per the instructions / suggestions of the Consultant/Customers representative.

## **10. LABOUR LAWS AND RULES**

The Contractor shall maintain relevant codes and fulfill all conditions and requirements in accordance with:

The Payment of Wages Act.

Contractor's Liability Act.

Workmen's Compensation Act.

Contract Labour (Regulation & Abolition) Act, 1970 and Central Rules, 1971.

Apprentice Act 1961.

Any other Act or enactment relating thereto and rules framed from time to time.

All statutory clearances like labour licenses will be obtained by Contractor within seven days to Consultant/Customers representative / Owner. Form V will be provided by Owner.

## **11. APPROVED BRAND NAMES**

Wherever brand names / model number are specified in this contract, they shall be followed strictly and a approved equivalent will be permitted only if the Contractor provides adequate proof to satisfy the Consultant/Customers representative / Owner that the particular item is no longer manufactured by the said company.

## **12. DISCREPANCIES AND ADJUSTMENT OF ERRORS**

In case of discrepancy between Schedule of Quantities, the specifications and / or the drawings the following order of preference shall hold good. Consultant/Customers representative shall give necessary instructions in writing.

- 1) Description in Schedule of Quantities.
- 2) Particular specification and special quantities, if any.
- 3) The drawings.
- 4) General Specifications.

If there are any provisions varying or conflicting with one another, the Consultant/Customers representative shall be the deciding authority with regard to the intension of the document.

## **13. INCOME TAX DEDUCTION AT SOURCE**

The owner shall deduct T.D.S per provisions of Income Tax Act from the bill amount of executed works. A certificate of deduction will be issued to the Contractor to the effect as per standard formats.

## **14. AS BUILT DRAWINGS**

Two copies of drawings released for "Issued for Construction" shall be given to Contractor. The Contractor shall put the As Built mark ups in full detail and submit the drawings to Consultant/Customers representative before handing over the work, failing which final certificate shall not be issued by the Consultant / Customers representative.

**15. R.O. (Rate Only) ITEMS**

~~Items where R.O. (Rate Only) is mentioned are not envisaged at this stage. However, the same will be executed if the need arises or those do become as substituted items and it will be treated same as other items of the contract. [Clause- deleted]~~

**16. FIRM PRICE**

The Rates and Prices as per the Schedule of Quantities shall remain firm for the entire period of completion.

However, for any extended period of contract due to reasons beyond the control of the Contractor, the contract price for the balance portion of the remaining works shall be adjusted for increase or decrease in accordance with Standard Escalation Clause which will be mutually agreed upon (Basic indices prevailing on the date of letter of intent.)

**17. SAFETY REGULATIONS OF OWNER'S PREMISES**

Contractor should obey Safety Regulations as per Owners' requirement. Use of Rope for lifting purpose shall be strictly prohibited.

**Read, Understood in the language Known to Me/Us and Accepted.**

**Signature of Contractor**

**Date & company seal**

# **SPECIAL CONDITIONS OF CONTRACT**

This document describes the Special Conditions of Contract as applicable to this contract.

#### QUALIFYING REQUIREMENT OF THE BIDDER

The bidder desirous to quote for the afore said work should have carried out the works of similar nature:

- i) Average annual financial turnover for similar works during the last 3 years ending 31<sup>st</sup> March 2014 of the previous should be at least 30% of the estimated cost.
- ii) Experience of having successfully completed similar works during last 7 years ending last day of month previous to the one in which applications are invited should be either of the following:-

The bidder should have three similar completed works costing not less than the amount equal to 40% of the estimated cost.

Or

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

Or

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

The bidder shall submit along with the offer the following pre-qualifying documents giving details about his company, works completed etc. as per the formats given below:

#### PARTICULARS OF THE BIDDERS

- 1) Name of the Company :
- 2) Nature of the Company :  
(I.e. Proprietorship/Partnership/  
Pvt. Ltd./Limited.)
- 3) Registered Address :
- 4) Contact Numbers :
- 5) Telegraphic Address :

- 
- 6) Name of the Directors/  
Partners/Owner: :
- 7) Turn over during last 5 years :
- 8) Name of the Bankers :
- 9) Sales Tax registration No. :
- 10) RTGS details of bidder :
- 11) No pendency of any litigation  
Criminal case against bidder :
- PAN of Income Tax :

1. DETAILS OF THE WORKS COMPLETED DURING LAST 5 YEARS  
(To be submitted)

2. DETAILS OF THE WORKS IN HAND  
(To be submitted)

3. INCOME TAX & SALES TAX CLEARANCE CERTIFICATES

The bidder shall furnish photo copy of income tax/sales tax clearance certificate from the competent authority along with his offer.

4. LIST OF MACHINERIES & OTHER ASSETS AVAILABLE  
(To be submitted)

5. LIST OF PERSONNEL (TECHNICAL) WITH QUALIFICATION AND EXPERIENCE  
(To be submitted)

FACILITIES BY THE OWNER

The owner shall provide the following facilities at project site, free of charge to the contractor:

Reference points: Owner/Consultant/Customers representative shall provide two points at reasonable distance to form the base line and to facilitate layout and survey work by the contractor and the reference Bench mark for levels.

If available, space shall be provided for labour camps free of cost by the client. The contractor shall clean/vacate make good the space as and when instructed by the Engineer in Charge. It shall be

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contractor's responsibility to maintain clean and hygienic condition in and around labour camps/site premises. The contractor shall also provide temporary toilet facility for labours and demolish the same as and when instructed by the Engineer in Charge.

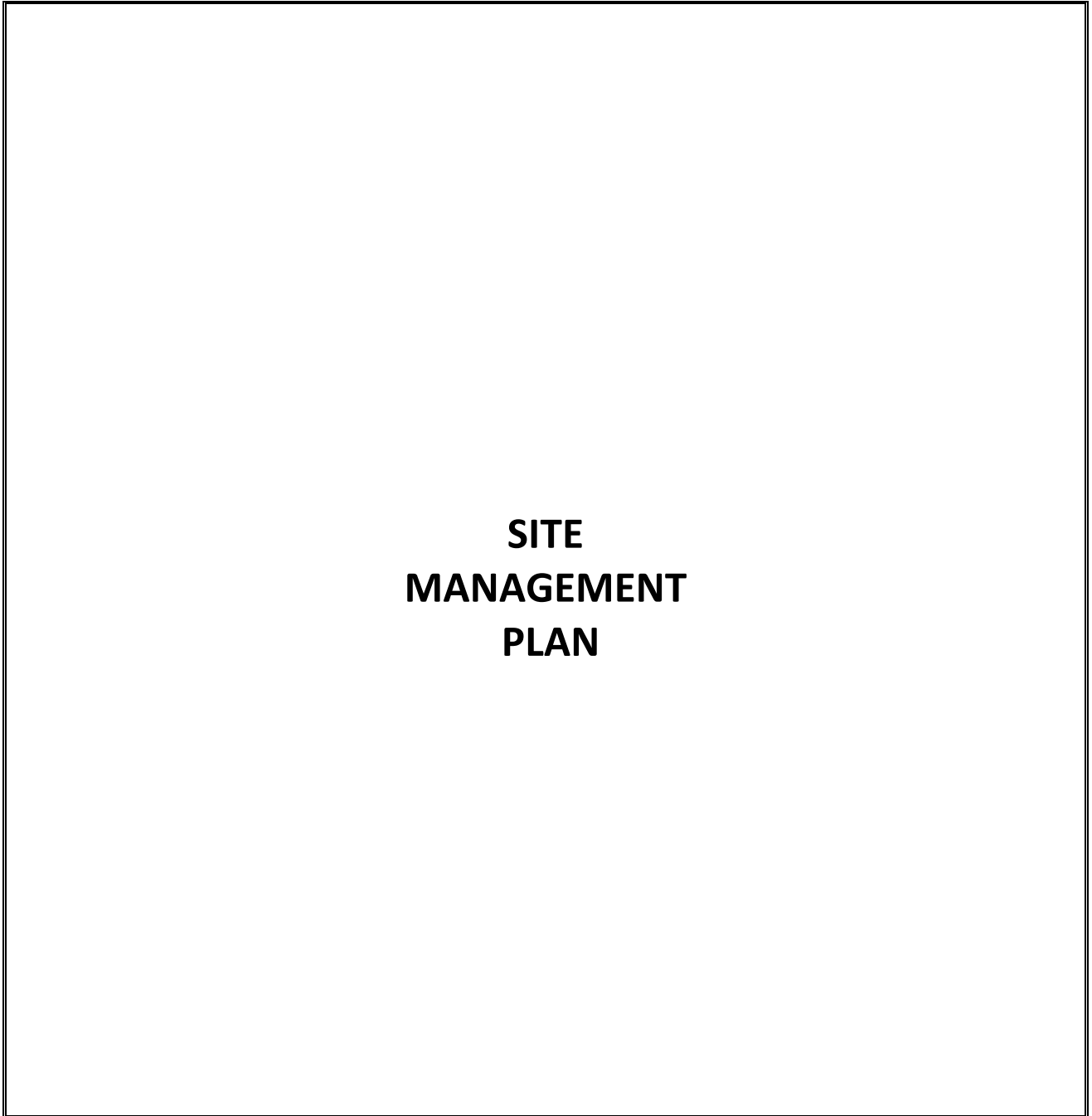
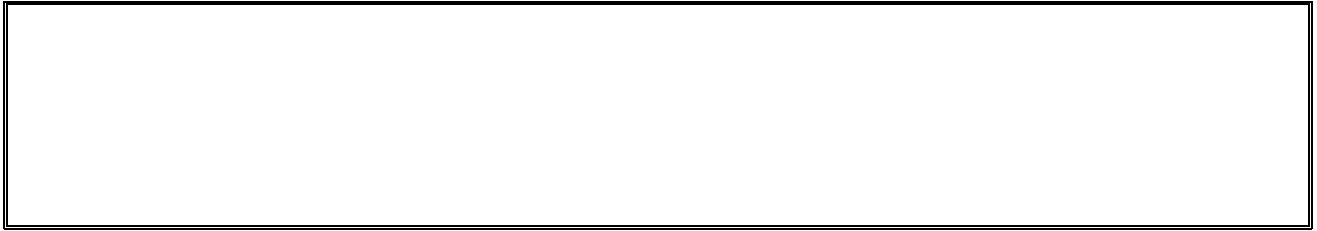
**DEVIATIONS**

No deviations are permitted from the tender specifications. Any conditional offers shall be summarily rejected.

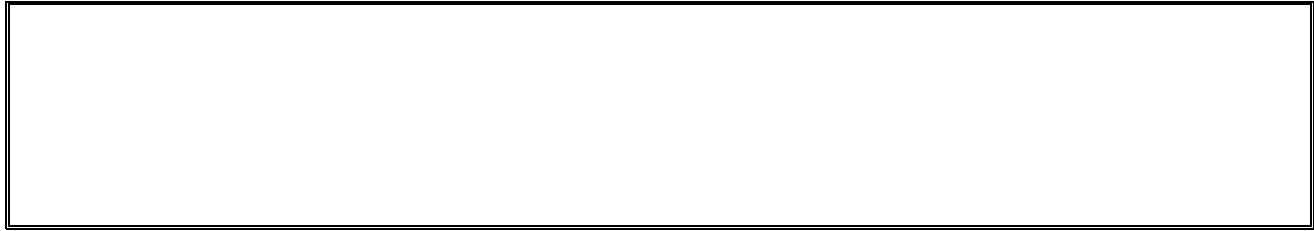
**RESOURCE PLAN  
AND  
TIME SCHEDULE**

**(To be submitted By Contractor)**





**SITE  
MANAGEMENT  
PLAN**



## **PART - 6 A**

### **SITE MANAGEMENT**

#### **1. SITE PRELIMINARIES**

The section shall be read in conjunction with General Terms and Conditions of Contract, Works Involving Construction and Erection (GCC) as applicable. On commencement of the work apart from other stipulations mentioned elsewhere in the Contract, the Contractor shall undertake the following free of cost:

The Contractor shall accept the existing levels and dimensions of grounds, roads, ditches, culverts, nallas, buildings, etc jointly recorded and agree in writing, as the same would be taken as the basis for all subsequent measurements.

The Contractor shall set out the work properly in the field from base lines and datum levels.

The Contractor shall establish adequate number of benchmarks at key locations in such manner as the Consultant/Customers representative may determine. Whenever required, Contractor shall also mark elevations and co-ordinates of foundations, pedestals, walls, columns and at cross sections of roads as required by the Consultant/Customers representative. All existing utilities such as water lines, drains, transmission lines etc which contractor may encounter during the operations shall be properly maintained and protected by means of shoring, strutting, planking etc from damage as directed by the Consultant/Customers representative.

The contractor shall take care to protect Owner's property during the construction. In case any property is damaged, the same shall be made good by Contractor at his own cost to the satisfaction of Owner and he shall face all consequences arising there from (e.g. accidental death of his workman after falling on underground live cable).

The Contractor shall co-operate fully in executing the work and work in harmony with other agencies working simultaneously at site.

#### **2. SITE ORGANIZATION AND EQUIPMENT**

Before the commencement of works, the Contractor shall submit to the Consultant/Customers representative / Owner for his approval a complete site organization chart describing the activity of each individual and also a complete list of equipment to be used by Contractor at site. The Consultant/Customers representative reserves his right to ask the Contractor for augmenting the personnel and equipment for proper and speedy execution of the works. The Contractor shall be particularly required to maintain quality control, planning department and good industrial relations.

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## 1. CO-ORDINATION PROCEDURE

3.1 The Contractor shall liaise closely with the Consultant/Customers representative, at all times in day-to-day work. Contractor shall be responsible for coordinating between the Consultant/Customers representative and the Owner's site staff.

3.2 The Contractor shall program, co-ordinate and phase all works including delivery of Sub-Contractor's and suppliers' materials and execution of Sub-Contractors' work in all respects.

3.3 Contractor shall be responsible for working out quantities of bulk materials such as pipes, pipe fittings, valves, structural steel etc as per drawings and documents submitted to Contractor to ensure availability of material and manpower as per planned schedule of work.

As soon as a drawing is released, Contractor shall submit the above to the Consultant/Customers representative, in prescribed format.

3.4 All works which are carried out and which do not come under preview of the drawings, shall be supported by the joint measurements and sketches, without which no bill shall be entertained.

## 4. PROGRESS REPORTS

Within Fifteen days of the receipt of Letter of Intent (LOI), the Contractor shall submit to the Consultant/Customers representative a detailed programme of work showing various activities in the form of bar-chart that the Contractor will follow for the completion of work. He shall also submit minimum resources such as manpower, equipment, machines and shuttering to carry out the job as per schedule with a guarantee of reinforcement if required to cater over lapses and re-adjustments in schedule. The details shall be given in prescribed format. Contractor shall also submit in quadruplicate the weekly progress reports (on every Monday) outlining.

- Progress achieved during the previous week.
- Program for the following week covering status drawings, material procurement, construction, fabrication and erection.
- Manpower and supervisory personnel employment on the job.
- Number and type of construction aids / tools / tackles available at site in working order.
- Shortfalls, if any and reasons thereof.
- Types and areas for which various permits are required.
- Accident Report.
- Test Reports.

## 5. SITE MEETINGS

During the course of the work, the Contractor shall hold progress meetings on site at regular intervals as determined by the Owner / Consultant/Customers representative for the purpose of coordinating the Contractors' and Sub-Contractors' works and delivery of Sub-Contractors' materials to ensure full compliance with the above. Minutes of such site meetings will be recorded, copies will be distributed to all persons concerned and full effect shall be given to all instructions mentioned herein.

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## **6. MEASUREMENTS**

Mode of Measurement shall be as per relevant provisions of standard IS Codes are applicable unless otherwise noted specifically. The Contractor shall maintain up-to-date areas / structure wise record of measurements of all the works carried out by him, jointly measured with the Consultant/Customers representative / Owner. No bill will be entertained unless accompanied by measurement sheets and material reconciliation statement duly signed by Consultant/Customers representative / Owner. Contractor shall give due notice to the Consultant/Customers representative and Owner whenever any works or materials are intended to be covered up in order that they may be inspected or that correct measurements may be taken before being so covered up. Consultant/Customers representative's decision on mode of measurement shall be final.

## **7. PRE-FINAL BILL**

Contractor shall submit a pre-final bill minimum one month in advance of final completion date, comprising of cumulative measurements based on the drawings and as certified (along with the reconciliation of material) up to the period. The final bill shall be submitted by the Contractor within one month of pre-final bill (along with material reconciliation.)

## **8. NOTES AND OBSERVATION**

During the entire construction period, the Contractor shall maintain a duplicate book. Observations and remarks pertaining to the construction will be entered into this book by the Owner / Consultant/Customers representative. All notifications made directly by the Owner / Consultant/Customers representative to the Contractors' address by means of registered mail shall be deemed to be sufficient and legal.

## **9. RETURN OF SURPLUS**

Notwithstanding anything contained to the contrary anywhere in this contract, wherever any materials for the execution of the contract are procured with the assistance of the Owner either by issue from Owner's stocks or purchase made under orders or permits or licenses issued by the Owner, the Contractor shall use the said materials economically and solely for the purpose of the contract and shall not dispose them off without the permission of the owner and shall return to the Owner all surplus or unserviceable materials that may be left with the contractor after completion of the contract or its termination for any reasons whatsoever on being paid or credited such price as the Owner shall determine having due regard to the initial cost and present condition of the materials at the time of such return thereof.

The price to be allowed to the Contractor however, shall not exceed the amount charged to him excluding the storage charges, if any.

## **10. MATERIAL RECONCILIATION**

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It shall be Contractor's responsibility to prepare material reconciliation statements for every month and submit the same along with Running Account (R.A.) Bills and final material reconciliation statement along with final bill for any material that may be issued by Owner as free issue or at issue rate.

## **11. DOCUMENTATION**

11.1 Final Bill: At the end of the job, the Contractor shall submit three copies of final certified quantities of each item of work including any extra / additional items.

11.2 As Built Sketches : At the end of the job, the Contractor shall submit three copies of as built sketches for portion / areas not constructed as per drawings but as per instruction of Owner / Consultant/Customers representative for all mechanical, piping, tanks and structural works.

## **12. CLEANLINESS**

The Contractor at all times shall keep the site reasonable free from all rubbish, offensive and harmful matter. On completion of the works, he shall remove all plant, tools, materials sheds etc. Apart from normal safety regulations as referred in General Terms and Conditions for contract involving construction and erection (GCC) , it shall be clearly understood by the Contractor that for the type of industrial structures covered by the contract, these are bound to be cut outs in floors for equipment, ducts, lifts, pipes etc. Till the time they are erected in positions, the cut outs from potential hazards and hence the same shall be properly barricaded at no extra cost, as directed by the Consultant/Customers representative.

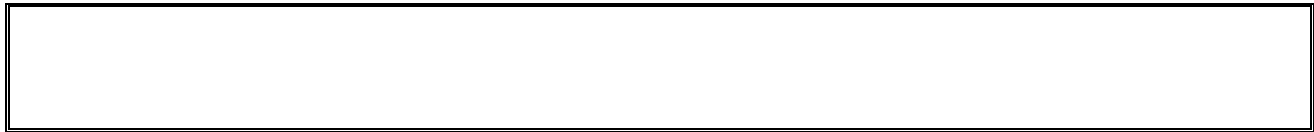
Storage areas for materials like pipes, pipe fittings, and valves structural steel etc shall be as per the direction of the Consultant/Customers representative. The Contractor shall be required to confine himself to these areas only for good housekeeping and for clear access.

## **13. SAFETY REGULATIONS**

In respect of all labour, directly or indirectly employed for the performance of the work by Contractor, the Contractor shall at his own expenses arrange for all the safety provisions as per the safety codes of C.P.W.D., Indian Standard Institution, The Electricity Act, The Mines Act and such other Acts as applicable. The Contractor shall also observe and abide by all Fire and Safety regulations of the Owner. Contractor shall at his own cost employ at least one safety officer at site.

**For the purpose of safety management and practices at site, Contractor shall follow the Consultant/Customers representative's / Owner's safety regulations as stipulated in their Safety Manual.**

**SAFETY RULES  
AND  
REGULATIONS**



## **PART 6**

### **SAFETY CONDITIONS FOR UNDERTAKING SITE WORKS BY CONTRACTORS**

These Safety Conditions shall not be regarded as exhaustive. These have been issued for the guidance of the Contractor and will not in any way absolve the Contractor from any such obligations or liabilities he might incur or transfer such obligations or liabilities to the company.

#### **GENERAL**

The Contractor shall obtain a “Work Permit” from owner before starting any work on site. The “Work Permits” are issued to prevent Contractors working in unauthorized areas and will be valid for specific area for a limited period.

The Contractor shall ensure that at no time during the erection and commissioning, his workmen operate any of the existing plant and Equipment in and around the site allocated to them.

The Contractor is to remove all waste material and rubbish from and around the work site and leave the job thoroughly cleaned up, ready for use.

With a view to the safety of its own Employees, Owner reserves the right to inspect at any time, any items of machinery or equipment brought into Owners’ site by the Contractor, his servants and agents and to prohibit the use on the site of any items, which in owners opinion is or may be dangerous, but the exercise of such right for the omission to exercise it any particular case shall not detract from the Contractor, his agents and servants responsibilities in respect of his machinery, equipment and system of working nor give the Contractor any right against Owner in respect thereof. The Contractor shall execute the work in a manner causing the least possible interference with the business of owner, or with the work of any other Contractor who may be engaged on the premises and shall at all times coming with the reasonable requirements of Owners’ senior project engineer at site.

All precautions necessary not only for the safe working of the Contractors’ workmen at site shall be taken by the Contractor, but shall also deploy all precautions to safeguard existing structures, equipment and workmen of other agencies in and around the job site.

#### **EXCAVATIONS**

In the event of an excavation being made or a man hole being lifted etc, the Contractor shall be responsible for seeing that any opening, sump or pit caused by him or his Sub-Contractors is securely fenced as required by the Factory Act.

#### **LIFTING GEAR**

The Contractor shall produce Test Certificate to Owner from approved certifying authorities for all of his lifting gear and hoists (slings, chains, hooks, chain pulley blocks, winches, hoists, cranes etc.) before being allowed to start work.

These certificates shall be retained at site with Contractor's supervisor for subsequent spot checks also

#### **PRESSURE AND LEAK TESTING**

Pressure and leak testing of all equipment is normally to be done hydraulically. However, in special cases where pneumatic testing is essential, written approval is to be obtained from Consultant/Customers representative before starting work. Under no circumstances gases other than Nitrogen, Carbon-dioxide, Air or steam are to be used.

#### **ELECTRICAL**

Portable power tools rated for above 50 Volts, supply and hand lamps rated for above 24 volts supply are not permitted at site.

The transformer shall be fed through an armoured cable with a 3 pin Rey role plug, properly earthed.

All power supply / distribution boards will have canopy for protection.

All supply points shall have proper plug and socket.

Contractor shall provided insulated flexible cables, distribution board including individual sockets with ELCB.

#### **FIRE REGULATIONS**

Fire Prevention: Before out any hot work (gas cutting, welding etc.) the Contractor is to obtain hot work permit from Owners' manager after ascertaining that the area is safe for working.

Smoking is strictly prohibited in site premises. This has been indicated by putting up sign boards as shown below:-

**"SMOKING IS NOT PERMITTED IN SIDE THE SITE PREMISES"**

Even at permitted locations, cigarette ash or butts are to be disposed off in ash trays provided.



No combustible material is to be stored on or near any source of heat (i.e. hot pipes, welding or gas cutting operations, boilers, furnaces, etc.) and before leaving the place of work or Contractor's sheds the Contractors' employees are to ensure that nothing is left which could start a fire.

Special attention is to be paid to collection and disposal of oil soaked cotton waste or rags. On no account are these to be dropped into corners, pushed below equipment or left hanging on pipes.

Gas cylinder should be used in a safe manner. They should not be dropped from heights. Acetylene cylinders should be kept in upright position. Oxygen cylinders should not be kept near inflammable materials like oil etc.

Tarpaulins are not to be used in the vicinity of welding / gas cutting jobs.

Contractors' employees of at least status of a foreman shall examine all arrangement before such work is commenced and shall satisfy them that all reasonable safety precautions have been taken.

The Contractor shall remove all waste material and rubbish from and about the work site and leave the job thoroughly cleaned up, ready for use.

Contractor shall duly return the permit after job completion

Fire Instructions:

- Instructions for the event 'If you discover a fire': Shout "Fire, Fire" loudly, run for nearest fire alarm switch and press it.
- If possible, also dispatch someone else immediately to the Main Gate / Gate Lodge.
- Where possible, switch off any electrical and gas apparatus near the fire.
- Check the nature of fire, pick up appropriate fire extinguisher and try to put out fire.
- For paper, cloth wood fires, - Use Soda Acid type extinguisher.
- For petrol, oil and fat fires, - Use foam or carbon dioxide fire extinguisher.
- For electrical fires,- Use only Carbon dioxide fire extinguisher.

On Hearing Fire Alarm: The alarm will be given by the continuous sounding of the siren.

Make sure that your place of work is safe and wait there for further instructions.

#### **PERSONAL PROTECTIVE EQUIPMENT**

Protective clothing, head and eye protection safety equipment are to be worn, at all times as per the job requirements.

#### **ACCIDENTS**

In case of injury or serious illness, notify concerned department on Owner's premises. All injuries are to be reported by filling in the injury report form, which should be made available with Consultant/Customers representative's representative at site.

All the Contractor's workmen shall be covered under the Employees' State Insurance Scheme/ Janata policy and other scheme which may be specified by the Statutory Authorities from time to time.

#### **SAFETY ENGINEER**

There would be full time Safety Engineer of the Contractor at site to ensure safety in all operations. He shall be a graduate engineer with training on safety in construction.

Owners' own safety engineer would inspect the operations and instruct from time to time. He would be also authorized to stop work in case he is of opinion that such activity or condition may lead to any accident.

#### **SAFETY REVIEW MEETING**

Periodic safety review meetings will be conducted by Owner / Owner's representative to review safety and for better co-ordination with other agencies. The Contractor's Senior Representative shall personally attend the meeting and ensure compliance.

#### **DAILY SAFETY MEETING**

Every day morning safety review will be held with Owner's Representative and issues will be discussed and action points shall be monitored, in a separate safety register / file.

#### **WORK AFTER NORMAL WORKING HOURS**

Extra care need to be taken for jobs being carried out after normal working hours with due re-validated work permit.

#### **CONVEYANCE FOR EMERGENCY**

Conveyance and person with driving license should be available at site at all times of work execution so that in case of an accident, the victim can be rushed to nearest medical center. Full time standby vehicle should be provided.

First Aid Box to be kept in 'Ready to Use' condition at all times at the site office.

The Site In-charge and key supervisors to be trained on first aid, for electrical shock, fall from heights, burns etc.

#### **PROCEDURE FOR CONTRACTOR'S ENTRY AND EXIT INTO / FROM THE SITE**

If contractor brings his property into the Site premises with the intension of taking it back at a later date, he shall:

- Present such items to the security department at the gate.
- Provide the security with two copies of list of these items neatly written (typed) on the Contractors' letterhead

The security Department shall then:

- Examine the goods and stamp both copies.
- The duplicate copy shall be returned to the contractor.
- The original shall be retained at the gate lodge and passed on to the Engineering stores the next morning.

Engineering stores shall:

- Compare his request against the valid challan indicating entry of the same material.
- Prepare a gate pass for the same (writing work of the gate pass shall be done by the Contractor and authorization by the senior departmental supervisor in engineering stores. Only one gate pass book shall be reserved for such duly and the stamp Contractors' Property' shall be stamped across the Gate Pass.
- Cancel out the original and duplicate challan or the pertinent items therein.

The security dept. shall permit exit of Contractors' property only on receipt of such gate passes as mentioned above.

**SITE RULES:**

- Keep tidy your working area at all times, remove your hand tools and unused materials before leaving and leave your working area tidy after completion of work, housekeeping is part of your job, BAD HOUSEKEEPING CREATES UNSAFE SITUATIONS
- Do not eat at other than designated places like improper and anti hygienic areas
- Do not approach with flame to the explosive and flammable material don't smoke at prohibited areas
- Do not tamper the electrical panels and switches.
- Don't enter the any place other than your responsible area without permission.
- Follow up the site traffic rules.
- Designated transportation roads will be used for the jobsite and shortcuts will not be used.
- Don't accept your guests during the working hours.

- Don't take out any materials or hand tools from jobsite without permission.
- Inform all accidents/incidents to your chief.
- Nobody will climb the electrical towers without permission.
- Collect the scrap materials at designated place.
- Carry the hazardous liquids in special containers.
- Don't keep sharp edge tools in your working clothes.
- Avoid unsafe acts at risky areas for fire safety.
- Use all necessary proper personal protective equipment and ensure the providing of necessary warning signs while working with machinery and equipments
- Obey the warning tags on the panels, switches, valves and control systems such as 'DANGER', 'DO NOT OPERATE', 'DO NOT TOUCH' and ensure the availability of these tags in case of necessity.
- Be careful in order not to damage the cables during the transportation of construction vehicles and equipments on the route.
- Welding is prohibited without mask and no one will look the welding arc with naked eyes.
- No flammable material will be kept in the working area.
- Take all necessary precautions for fire safety.
- Don't use any vehicles if you are not driver or operator. Operators will obey the all traffic rules on the jobsite.
- SPEED LIMIT IS 10 KM/H OBEY THE SPEED LIMIT AND WARN THE PEOPLE WHO DOESN'T OBEY
- Be careful at the intensive vehicle traffic area on the jobsite and keep these roads open at all times.
- Use designated roads for transportation to the jobsite and always walk at the left side of road.
- Don't keep, eat or drink any food or drink when working at closed area.

**TECHNICAL CONDITION OF CONTRACT**



## TECHNICAL CONDITIONS OF CONTRACT

### INTENT

The intent of this document is to define the technical requirement and the quality standards of the materials to be incorporated in the works and the workmanship during the execution of the works.

### GENERAL

All works shall be as per the relevant IS / CPWD specifications unless otherwise mentioned below:

Wherever in the specifications mention is made of any produce by name, make or catalogue number, it shall be interpreted as establishing a standard of quality and shall not be construed as limiting competition. The contractor, in such cases, may use any product, which is equal to that name, provided prior written approval from the Consultant / Customers representative is obtained.

Unless substitution is requested no deviation from the specification will be permitted. Failure to propose the substitution of any article within 30 days after signing of the contract or after specific details given by the Consultant/Customers representative will be deemed sufficient cause for the denial of the request for substitution.

If any particular structural steel sections mentioned in the drawing and design are not available, and the employer and the Consultant/Customers representative are convinced accordingly, the alternative sections are to be decided by the Consultant/Customers representative at his discretion. If no extra charges have been specified for items involving work below or above ground level or above roof level for additional lifts, it should be presumed that rates for such items as shown in drawings and bill of quantities are inclusive of work at additional depths or lifts.

The contractor shall, without any extra charge, at all stages furnish any data required by the Consultant/Customers representative such as levels, falls, slopes etc. to enable him to take suitable decisions required for proper execution of the work.

The Consultant/Customers representatives' decision in these respects shall be final and binding on the contractor.

**SECRECY**

Contractor shall not disclose any information furnished by the owner/Consultant/Customers representatives nor any drawings, reports and any other information prepared by the contractor for the project, without the prior written approval of the owner, except in so far as disclosure is necessary for the performance of contractors work and services under this contract.

**TECHNICAL SPECIFICATIONS**

The various items indicated in BOQ shall be read in conjunction with the technical specifications of the tender, and IS/CPWD specifications as applicable to such items. In the event of variance and /or ambiguity or incompleteness between Technical specifications, IS specifications, CPWD stipulations, and BOQ description, the following order shall prevail .

- a) BOQ Description
- b) Technical Specifications
- c) IS specifications
- d) CPWD specifications

- **TECHNICAL SPECIFICATIONS AND SCOPE OF WORK FOR ROAD REPAIRING AND RE-CARPETING**

**50.3. SPECIFICATIONS:**

**1.1** The specifications for the entire work under the Contract shall be in accordance with the latest "CPWD Specifications", including all correction slips, Indian Road Congress Standard Specifications and Codes of Practice, latest "Indian Standard codes". Wherever these codes are silent, the same shall be governed by sound Engineering practice, and the decision of the "Engineer-in-Charge [EIC]", in matter of interpretation, shall be final and binding on the Contractor.

**1.2** The bidder must read carefully all such specifications/codes before submitting their bid. It shall be deemed that the Bidder has thoroughly read & understood the "GCC", "SCC" & "Specifications & Scope of Work" before filling in the rates/prices, irrespective of the fact whether they have really done so or not, and no claim on this account shall be entertained at a later date.

**1.3 Order of Precedence for specifications of works:** i) Letter of Acceptance ii) Technical Specifications and Scope of Work iii) CPWD Specifications Vol – I & II iv) Indian Standard Codes v) Indian Road Congress Standard Specifications vi) Standard Engineering Practice

## **2.0 SCOPE OF WORK:**

The scope of work shall be generally as per Schedule of Rates, drawings etc. for the subject work which are self-explanatory but not limited to the quantities and specifications indicated therein. The scope of work shall include road repair and re-carpeting work at IITM Campus office and colony roads. The work includes tools, tackles, men and machine as required for the completion of the job in all aspect as per contract specifications. Contractor's scope of work shall include but not limited to the following:-

**2.1 REPAIRING POTHoles DEEPER THAN 50 MM:** Potholes which are considerably deeper than 50 mm shall be repaired as per following:

**i) Cutting:** Road surface around potholes shall be cut in to a square/ rectangular shape for easy measurement.

**ii) Filling:** Filling potholes with graded stone aggregate (size range 53 mm to 0.075 mm ) till depth 50 mm from top of existing road surface (this includes providing, laying, spreading and compacting).

**iii) Surface dressing:** Provide Surface dressing on new surface in two coats with bitumen of grade VG -10 of approved quality using 1.8 kg of bitumen per sq.mtr with 1.5 cum of stone chippings 13.2 mm nominal size per 100 sq.mtr of road surface for first coat and 1.25 kg. of bitumen per sq.mtr with 1.50 cum of stone chippings 11.2 mm nominal size per 100 sq.mtr of road surface for second coat, including consolidation of each coat separately with road roller of 6 to 8 tonne capacity etc. complete. iv) Measurement will be taken for each pothole in cum (Area of pothole x depth)

**2.2 APPLYING TACK COAT OF HOT STRAIGHT RUN BITUMEN:** Providing and applying tack coat using hot straight run bitumen of grade VG – 10 (conforming to IS: 73, 2013) including heating the bitumen, spraying the bitumen with mechanically operated spray unit fitted on bitumen boiler, cleaning and preparing the existing road surface as per specifications: On bituminous surface @ 0.50 Kg / sq.mtr.

**i) PREPARATION OF SURFACE** Prior to the application of bitumen, all vegetation, loose sealing compound, caked mud, animal dung, dust, dirt and foreign material shall be removed from the entire surface of the pavement and from existing dummy, construction and expansion joints (wherever existing) by means of mechanical sweepers and blowers, otherwise with steel wire brushes, small picks, brooms or other implements as approved by the Engineer-in-Charge. The material so removed shall be disposed off as directed by the Engineer-in-Charge. The tack coat shall not be applied nor any bitumen work done during rainy weather or when the surface is damp or wet or when the atmospheric temperature in the shade is not more than 16°C.

**ii) APPLICATION OF TACK COAT** Bitumen shall be heated in a boiler to a temperature of 165°C to 175°C and maintained at that temperature. Temperature shall be checked at regular intervals with the help of a thermometer. Hot bitumen shall be applied evenly to the clean, dry surface by means of a pressure



sprayer at specified rate. Even and uniform distribution of bitumen shall be ensured. Bitumen shall be applied longitudinally along the length of the pavement and never across it. Excessive deposits of bitumen caused by stopping or starting of the sprayer or through leakage or any other reason shall be suitably rectified.

**iii) MEASUREMENT & RATE** Length and breadth shall be measured correct to a cm, along the surface of pavement. Area shall be worked out in sq.mtr correct to two places of decimal. Rate shall include the cost of all materials and labour involved in all the operations described above.

### **2.3 PROVIDING AND LAYING 2.5 CM/ 4 CM THICK PREMIX CARPET:**

**A.** 2.5 cm premix carpet surfacing with 2.25 cum and 1.12 cum of stone chippings of 13.2 mm and 11.2 mm size respectively per 100 sq.mtr and 52 kg and 56 kg of hot bitumen per cum of stone chippings of 13.2 mm and 11.2 mm size respectively, including a tack coat with hot straight run bitumen, including consolidation with road roller of 6 to 9 tonne capacity etc. complete (tack coat to be paid for separately). With paving Asphalt grade VG - 30 with no solvent.

**B.** 4 cm premix carpet surfacing with 3.6 cum and 1.8 cum of stone chippings of 13.2 mm and 11.2 mm size respectively per 100 sq.mtr and 52 kg and 56 kg of hot bitumen per cum of stone chippings of 13.2 mm and 11.2 mm size respectively, including a tack coat with hot straight run bitumen, including consolidation with road roller of 6 to 9 tonne capacity etc. complete as per instructions of EIC: With paving Asphalt grade VG - 30 with no solvent (tack coat to be paid for separately). The carpeting material will be brought from the hot mix plant only, available in the surrounding area. This item shall include:

**i) PREPARATION OF SURFACE Repairs:** Pot holes or patches and ruts in surface course which is to be surface treated, shall be repaired by removal of all loose and defective material by cutting in rectangular patches and replacement with suitable material. For the purpose of repairs the area of pot holes shall be taken up to 0.75 sq.mtr and depth up to 5 cm. All pot holes, patches and ruts up to 2.5 cm deep shall be repaired and brought to level with premix and properly consolidated while those of depths greater than 2.5 cm shall be repaired with similar specifications as adopted originally. Cleaning: Prior to the application of the binder, all dust, dirt, caked mud, animal dung, loose and foreign material etc. shall be removed 30 cm on either side, beyond the full width to be treated, by brooms etc. The material so removed shall be disposed off as directed by the Engineer-in-Charge. For a water bound macadam surface, the interstices between the road metal shall be exposed up to a depth of about 10 mm by means of wire brushes. The surface shall then be brushed with soft brooms to remove all loose aggregate. Finally the traces of fine dust which get accumulated while brushing shall be thoroughly removed from the surface by blowing with gunny bags. The prepared surface shall be closed to traffic and maintained fully clean till the binder is applied.

### **ii) MATERIALS**

**a.** 2.25 Cum and 1.12 cum of stone chippings of 13.2 mm and 11.2 mm size respectively per 100 sq.mtr for 2.5 cm premix carpet.

b. 3.6 Cum and 1.8 cum of stone chippings of 13.2 mm and 11.2 mm size respectively per 100 sq.mtr for 4 cm premix carpet.

c. Binder material shall be of 52 kg and 56 kg of hot bitumen (heated 149 C to 177C; conforming to IS: 73, 2013) per cum of stone chippings of 13.2 mm and 11.2 mm size respectively

iii) **APPLICATION OF TACK COAT** Tack coat shall be applied and to be paid separately as described in 2.2.

iv) **PREPARATION OF PREMIX** The aggregate shall be dry and suitably heated to temperature as directed by Engineer-in-Charge before these are placed in the mixer to facilitate mixing with the binder. Mixers of approved type shall be employed for mixing the aggregates with the bituminous binder. The binder shall be heated to the temperature appropriate to the grade of bitumen approved by the Engineer-in-Charge, in boilers of suitable design avoiding local overheating and ensuring a continuous supply. The aggregates shall be dry and suitably heated to a temperature as directed by Engineer-in-Charge before these are placed in the mixer. After about 15 seconds of dry mixing, the heated binder shall be distributed over the aggregates at the rate specified. The mixing of binder with chippings shall be continued until the chippings are thoroughly coated with the binder. The mix shall be immediately transported from the mixer to the point of use in suitable vehicles or wheel barrows. The vehicles employed for transport shall be cleaned and be covered over in transit if so directed.

v) **SPREADING AND ROLLING** The premixed material shall be spread on the road surface with rakes to the required thickness and camber or distributed evenly with the help of a drag spreader, without undue loss of time. The camber shall be checked by means of camber boards and inequalities evened out. As soon as sufficient length of bituminous material has been laid, rolling shall commence with 6 to 9 tone power rollers, preferably of smooth wheel tandon type, or other approved plant. Rolling shall begin at the edges and progress towards the centre longitudinally. Except on the super elevated portions rolling shall progress from the lower to upper edge, parallel to the centre line of the pavement. The consolidated thickness shall not at any place be less than the specified thickness by more than 25%. However, the average thickness shall not be less than that specified in the item. When the roller has passed over the whole area once, any high spots or depressions which become apparent shall be corrected by removing or adding premixed materials. Rolling shall then be continued until the entire surface has been rolled to compaction and all the roller marks eliminated. In each pass of the roller, preceding track shall be overlapped uniformly by at least 1/3 width. The roller wheels shall be kept damp to prevent the premix from adhering to the wheels and being picked up. In no case shall fuel/lubricating oil be used for this purpose. Rollers shall not stand on newly laid material as it may get deformed thereby. The edges along and transverse of the carpet, laid and compacted earlier shall be cut to their full depth so as to expose fresh surface which shall be painted with a thin surface coat of appropriate binder before the new mix is placed against it.

vi) **SURFACE FINISHING** The surface regularity both in longitudinal and transverse directions shall be within the tolerances as following Longitudinal profile Max. permissible undulation when measured with 3 M straight edge Cross profile Max. permissible variation from specified profile when measured with a camber template 10 mm 6mm The longitudinal profile shall be checked during rolling with a three meters long straight edge and graduated wedge at the middle of each traffic lane along the road. Similarly the transverse profile shall be checked with adjustable templates at intervals of 10 meters.

**vii) RECTIFICATION** Where the surface irregularity fall outside the specified tolerances the contractor shall be liable to rectify it to the satisfaction of Engineer-in-Charge by adding fresh material and recompacting to specifications where the surface is low. Where the surface is high the full depth of the layer shall be removed and replaced with fresh material and compacted to specifications.

**viii) MEASUREMENTS AND RATES** The length and width of the finished work shall be measured correct to a cm along the finished surface of the road. The area shall be calculated in square meter, correct to two places of decimal. The rate shall include the cost of materials and labour involved in all the operations described above for the particular item.

**2.4 PROVIDING AND APPLYING SEAL COAT:** This work shall consist of the application of a seal coat for sealing the voids in a bituminous surface laid to the specified levels, grade and cross fall (camber). Providing and laying seal coat of premixed fine aggregate (passing 2.36 mm and retained on 180 micron sieve) with bitumen using 128 kg of bitumen of grade VG - 10 bitumen per cum of fine aggregate and 0.60 cum of fine aggregate per 100 sqm of road surface, including rolling and finishing with road roller all complete. The binder shall be heated in boilers of suitable design, approved by the Engineer-in-Charge to the temperature appropriate to the grade of bitumen or as directed by the Engineer-in-Charge. The aggregates shall be dry and suitably heated to a temperature between 150 C and 165 C or as directed by the Engineer-in-charge before these components are placed in the mixer. Mixing of binder with aggregates to the specified proportions shall be continued until the latter are thoroughly coated with the former. The mix shall be immediately transported from the mixing plant to the point of use and spread uniformly on the bituminous surface to be sealed. As soon as a sufficient length has been covered with the premixed material, the surface shall be rolled with an 8-10 tonne smooth-wheeled roller. Rolling shall be continued until the premixed material completely seals the voids in the bituminous course and a smooth uniform surface is obtained. Further, the prepared finished surface shall be protected from traffic for 24 hours or such period as may be directed by the Engineer-in-Charge.

**2.5 PROVIDING AND APPLYING OF ROAD MARKING STRIPS:** Painting road surface marking with adequate no's of coats (minimum 2 coats) to give uniform finish with ready mixed road marking paint conforming to IS: 164, on bituminous surface in white/yellow shade, including cleaning the surface of all dirt, scales, oil, grease and foreign material etc. complete.

**2.6 All safety precautions** are to be taken for execution of the work particularly for hot work, etc. required for the road work.

**2.7 The contractor shall have to abide by all SAFETY RULES & REGULATIONS** applicable for the works. This will include issue of security passes for all workers, provision of safety equipment, personal protective equipment etc. Safety equipment/ personal protective equipment will have to be provided by contractor at his own cost without any payment liability on GAIL.

**2.8 All materials should be approved by EIC/site engineer** before execution, failing which material used will not be accepted and no payment will be made towards the same. 2.9 Contractor should ensure the safety of his material at his risk and cost. GAIL will not be responsible for any type of damage or loss etc.

**2.10 Contractor is advised to** make a site visit before quoting for the tender to understand the scope of work.

**3.0 TESTING & INSPECTION:**

**3.1** The Contractor shall carry out the various tests as per CPWD/ IRC/ IS Specifications/ Standards as per requirements of work and instructions of EIC. No separate payment shall be made unless otherwise specified in schedule of rates.

**3.2** All the tests either on the field or at outside laboratories concerning the execution of the work and supply of materials by the Contractor shall be carried out by Contractor at his own cost.

**3.3** Any work not conforming to Technical Specifications and Scope of Work, concerning CPWD specifications, Indian Road Congress Specifications and IS codes shall be rejected forthwith and the Contractor shall carryout the necessary rectification at his own cost.

**3.4** All results of inspection and tests will be recorded in the inspection reports, pro forma of which will be approved by the Engineer-in-Charge. These reports shall form part of the completion documents.

**3.5** Inspection and acceptance of work shall not relieve the Contractor from any of his responsibilities under this Contract.

**3.6** Contractor shall submit original copies of different certificates of required tests performed in the field and laboratory as per specification of relevant BIS Codes /CPWD Specifications to the EIC.

**3.7** Any additional test

**3.8** If EIC feels requirements of any of these test, the Contractor has to carry out test as per instructions of EIC.

# **BILL OF QUANTITY (BOQ)**

**To be submitted along with Technical BID**

**BoQ Repairing and Carpeting of internal roads in Campus**

S.NO.	ITEM DESCRIPTION	PART- A		PART B		PART C		Total Qty	UNIT	Basic RATE	TAXES		TOTAL AMOUNT WITH TAXES
		QTY		QTY		QTY					SERVICE TAX @ 4.944%	VAT @ 5%	
<b>1</b>	<b>Removing Existing Road Crust...</b> Removing Existing Road Crust by mechanical means , levelling , Preparation of sub-base and compacting the same with 8 to 10 ton power roller including forming camber and gradients, watering and rolling to reach required density complete. Inclusive of carting away excessive material in IITM campus with lead up to 2.00 km.	1,050.00		180.00		690.00		1,920.00	SQM				
<b>2</b>	<b>Excavation in soil, soft &amp; hard murum...</b> Excavation for road, Gutters, foundations in soil, soft , hard murum, & existing murum filling including Shifting of excavated stuff in site premises upto 2 km, stacking, spreading, Levelling as directed,dewatering by pump, preparing the bed for the foundation & necessary back filling with available earth, watering , ramming Including shoring, strutting etc complete as directed. including royalties as applicable if any.												
	A) 0.00 - 1.50 m Depth	195.00		135.00		165.00		495.00	CUM				
<b>3</b>	<b>Filling with contractors murum...</b>	180.00		128.00		155.00		463.00	CUM				

S.NO.	ITEM DESCRIPTION	PART - A			PART B			PART C			Total Qty	UNIT	Basic RATE	TAXES		TOTAL AMOUNT WITH TAXES
		QTY	QTY	QTY	QTY	QTY	QTY	SERVICE TAX @ 4.944%	VAT @ 5%							
	Filling in Road and footpath area with contractor's locally available filling material (murum) with all leads and lifts brought from outside ( material to be approved by engineer in charge ) including filling in layers of 20-30 cm., watering, compaction leveling, forming camber and gradients. The proctor density of such compacted fill shall be 95% of standard proctor including all royalties etc. complete.															
4	Applying Tack coat of hot straight run bitumin:	1,100.00	270.00	740.00					2,110.00	Sqmt						
	Providing and applying tack coat using hot straight run bitumen of grade VG – 10 (conforming to IS: 73, 2013) including heating the bitumen, spraying the bitumen with mechanically operated spray unit fitted on bitumen boiler, cleaning and preparing the existing road surface as per specifications: On bituminous surface @ 0.50 Kg / sqm.															
5	Semi Grout 50 mm thk ...	1,100.00	270.00	740.00				2,110.00	SQM							





S.NO.	ITEM DESCRIPTION	PART - A			PART B			PART C			Total Qty	UNIT	Basic RATE	TAXES		TOTAL AMOUNT WITH TAXES
		QTY	QTY	QTY	QTY	QTY	QTY	SERVICE TAX @ 4.944%	VAT @ 5%							
	3. Mixing 6 mm & 12 mm aggregates ( 2.1 Cum / 100 Sqm) with IS grade S 90 bitumen (1.2 Kg/Sqm) in a bitumen mixer and laying wearing course of premix chips. Rate to include all materials, labour, tools, plant and equipment and compaction with power roller at all stages. (Spec. No. M.O.R.T. & H-511 ) i) using 60/70 grade asphalt	7,200.00	2,600.00	2,300.00	7,200.00	2,600.00	2,300.00	7,200.00	2,600.00	2,300.00	12,100.00	SQM				
7	<b>Seal Coat 6 mm thick</b> Providing and laying bituminous liquid seal coat 6 mm thick to black top surface including - Providing and laying seal coat of premixed fine aggregate ( passing 2.36 mm and retained on 180 micron sieve) with bitumen using 128 kg of bitumen of grade VG - 10 bitumen per cum of fine aggregate and 0.60 cum of fine aggregate per 100 sqm of road surface, including rolling and finishing with road roller all complete.	7,200.00	2,600.00	2,300.00	7,200.00	2,600.00	2,300.00	7,200.00	2,600.00	2,300.00	12,100.00	SQM				
8	<b>Road curbing...</b> Providing and fixing road curbing with precast (M25 grade) slab of size 450X300X150mm thk including excavation , backfilling and joining the slabs in CM 1:3 . The bottom of 150 mm curb shall be grouted with concrete 1:2:4 to hold in position before backfilling including oil painting the kerb stones in two coats . Etc. complete . The road side edge of curb is to be chamfered	1,815.00	830.00	1,253.00	1,815.00	830.00	1,253.00	1,815.00	830.00	1,253.00	3,898.00	RMT				





**TENDER NOTICE NO. IITM/CE/WORKS/ROAD/2014-15/09**

**NAME OF WORK: REPAIRS TO BITUMINUS ROAD  
FOR OFFICE AND COLONY CAMPUS AT IITM,  
PASHAN, PUNE-411008**

**VOLUME – II**

**COMMERCIAL BID**

**BILL OF QUANTITY (BOQ)**  
**To be submitted duly filled along with Commercial**  
**BID**

**BoQ Repairing and Carpeting of internal roads in Campus**

S.NO.	ITEM DESCRIPTION	PART- A		PART B		PART C		Total Qty	UNIT	Basic RATE	TAXES		TOTAL AMOUNT WITH TAXES
		QTY		QTY		QTY					SERVICE TAX @ 4.944%	VAT @ 5%	
<b>1</b>	<b>Removing Existing Road Crust...</b> Removing Existing Road Crust by mechanical means , levelling , Preparation of sub-base and compacting the same with 8 to 10 ton power roller including forming camber and gradients, watering and rolling to reach required density complete. Inclusive of carting away excessive material in IITM campus with lead up to 2.00 km.	1,050.00		180.00		690.00		1,920.00	SQM				
<b>2</b>	<b>Excavation in soil, soft &amp; hard murum...</b> Excavation for road, Gutters, foundations in soil, soft , hard murum, & existing murum filling including Shifting of excavated stuff in site premises upto 2 km, stacking, spreading, Levelling as directed,dewatering by pump, preparing the bed for the foundation & necessary back filling with available earth, watering , ramming Including shoring, strutting etc complete as directed. including royalties as applicable if any.												
	A) 0.00 - 1.50 m Depth	195.00		135.00		165.00		495.00	CUM				
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4	Applying Tack coat of hot straight run bitumin:	1,100.00			270.00			740.00			2,110.00	Sqmt				
	Providing and applying tack coat using hot straight run bitumen of grade VG – 10 (conforming to IS: 73, 2013) including heating the bitumen, spraying the bitumen with mechanically operated spray unit fitted on bitumen boiler, cleaning and preparing the existing road surface as per specifications: On bituminous surface @ 0.50 Kg / sqm.															
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	3. Mixing 6 mm & 12 mm aggregates ( 2.1 Cum / 100 Sqm) with IS grade S 90 bitumen (1.2 Kg/Sqm) in a bitumen mixer and laying wearing course of premix chips. Rate to include all materials, labour, tools, plant and equipment and compaction with power roller at all stages. (Spec. No. M.O.R.T. & H-511 ) i) using 60/70 grade asphalt	7,200.00	2,600.00	2,300.00	7,200.00	2,600.00	2,300.00	7,200.00	2,600.00	2,300.00	12,100.00	SQM				
7	<b>Seal Coat 6 mm thick</b> Providing and laying bituminous liquid seal coat 6 mm thick to black top surface including - Providing and laying seal coat of premixed fine aggregate ( passing 2.36 mm and retained on 180 micron sieve) with bitumen using 128 kg of bitumen of grade VG - 10 bitumen per cum of fine aggregate and 0.60 cum of fine aggregate per 100 sqm of road surface, including rolling and finishing with road roller all complete.	7,200.00	2,600.00	2,300.00	7,200.00	2,600.00	2,300.00	7,200.00	2,600.00	2,300.00	12,100.00	SQM				
8	<b>Road curbing...</b> Providing and fixing road curbing with precast (M25 grade) slab of size 450X300X150mm thk including excavation , backfilling and joining the slabs in CM 1:3 . The bottom of 150 mm curb shall be grouted with concrete 1:2:4 to hold in position before backfilling including oil painting the kerb stones in two coats . Etc. complete . The road side edge of curb is to be chamfered	1,815.00	830.00	1,253.00	1,815.00	830.00	1,253.00	1,815.00	830.00	1,253.00	3,898.00	RMT				



