
INDIAN INSTITUTE OF TECHNOLOGY BOMBAY

TENDER FOR

Comprehensive interior upgradation and refurbishment of auditorium, seminar rooms, conference room, atrium and VIP lounge including civil furniture, PHE, MEP, HVAC and LMS works of Victor Menezes convention centre at IIT Bombay Powai, Mumbai – 400076.

NIT No.: EO/A/ACAD/WKS-278/25-26

Dated: 19th February, 2026



SUPERINTENDING ENGINEER, ESTATE OFFICE

INDIAN INSTITUTE OF TECHNOLOGY BOMBAY, POWAI, MUMBAI 400076.

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PART A-1:

NOTICE INVITING TENDER (NIT)

1. Tender Details

1.1 Superintending Engineer (Estate Office), IIT Bombay invites percentage rate composite Tender for the following work from the Pre-Qualified Bidders for the subject Project:

NIT No.	NIT No.: EO/A/ACAD/WKS-278/25-26 Dated 19/02/2026
Name of Work & Location	Comprehensive interior upgradation and refurbishment of auditorium, seminar rooms, conference room, atrium and VIP lounge including civil furniture, PHE, MEP, HVAC and LMS works of Victor Menezes convention centre at IIT Bombay Powai, Mumbai – 400076.
Estimated cost put to tender (Civil, PHE, Electrical, ELV, BMS Firefighting, AV, LMS, Signage, Furniture works)	Rs.23,90,10,920.10/-
Add GSTs (18%)	Rs.4,30,21,965.60/-
Gross Total amount	Rs. 28,20,32,886/-
Earnest Money Deposit	Rs. 56,00,000/- (Rupees Fifty Six Lacs only)
Period for Completion	12 Calendar Months including monsoon period

1.2 Scheduled Dates

- i. Date of Notice to Inviting the Tender: 19.02.2026
- ii. Date for Pre-Bid meeting : **02nd March, 2026 at 03:00 p.m**
- iii. Date for submission of Tender (including EMD) is **13.03.2026 between 09:15 a.m to 11:15 a.m. in the Conference Room of the Estate Office**
- iv. Date and time for opening of Technical Bid (Envelop 1): **13.03.2026 at 11.30 a.m.**
- v. Time and date of opening of financial bid (Envelop 2): **Shall be intimated at later stage**

2. Brief Particulars of the work for which Tenders are invited:

Indian Institute of Technology (IIT) Bombay is situated in Powai, Mumbai. The campus is fully functional. Following is the brief detail of work under present tender. However, this scope is indicative only and not exhaustive.

2.1 Project Description:

2.2 The existing Victor Menezes Convention Centre building is consisting of Lower Ground floor + Ground + 5 Academic floors + Terrace floor having facilities like Laboratories, Classrooms, Lecture halls etc. and is located within the IIT Bombay, Powai campus in Mumbai.

2.3 Scope of Work

- (a) Renovation, Refurbishment, Additions & Alterations to Victor Menezes Convention Centre building for Civil, Interior, MEP, Lighting, AV and Signage works includes the following:

A) CIVIL & INTERIOR FINISHES WORK

1. AAC Block masonry works,
2. Putty and Plastering works (Internal)
3. Light weight filling
4. Miscellaneous Civil repair works
5. New Stone (Granite / Engineered Marble / Kota) flooring, skirting and dado
6. New Tile (Vitrified / Ceramic) flooring, skirting and dado
7. New Stone (Granite / Engineered Marble) jambs, soffits, sills and coping
8. New Granite stone treads and risers
9. Repairing of existing Stone (Granite / Engineered Marble / Kota) flooring, skirting, dado, tread and risers
10. LVT flooring
11. Carpet flooring
12. Wooden stage flooring
13. Pantry / Dish wash / Wash basin / Vanity counters
14. Panelling (Gypsum / Marine grade Plywood / HDHMR) work finished with veneer & PU polish and laminate
15. Acoustic panelling system
16. Fluted / groove panels
17. Pin Perforate Laminate panelling
18. Full height Dry wall partition
19. Fabric wall panelling
20. Perforated Aluminium sheet wall lining
21. Lacquered Glass Cladding
22. Wooden Pelmet
23. Cement board panelling
24. Gypsum false ceiling
25. Calcium silicate false ceiling
26. Wooden false ceiling
27. Aluminium Baffle ceiling
28. Wooden rafter ceiling
29. Wooden ceiling in Hexagon pattern
30. Acoustical Cloud ceiling
31. Illuminated stretch fabric ceiling
32. Internal Painting (Lustre / Plastic emulsion / Texture)
33. POP Punning
34. Epoxy paint

35. Wallpapers
36. Vinyl Graphics
37. Full height Glass Partition system with Glass doors
38. Acoustical Door shutter with frame and hardware
39. Refurbishment existing Door shutters
40. Wooden flush door shutters with hardware
41. Urinal partitions
42. SS Glass railing
43. Stacking of salvageable materials and disposing-off unserviceable materials, rubbish, debris etc. outside IIT-B campus
44. Required strengthening and providing safety measures during demolition works
45. Extra care to be taken to avoid damage other existing parts of the building

B) MEP WORKS

1) HVAC SYSTEM

Presently, all the seminar/lecture rooms, Ground floor Auditorium are being catered by the Water-cooled chillers located at the basement. Cooling Towers are located at the Terrace floor. The building has chilled water distribution network with multiple indoor units serving seminar rooms.

Common areas such as Foyers, passages and lobby areas are not part of the present air-conditioning system. It is proposed to install VRF AC Units to serve all the common areas. Floor wise Treated Fresh Air Units are also proposed with separate outdoor units. All the Outdoor units would be installed at the terrace level. Contractor is expected to study all the HVAC layouts in conjunction with Architectural and Interior layouts.

The scope also includes SITC of Chilled water pumps, PPR pipes with valves and accessories. The scope also includes Toilet ventilation system and staircase pressurization system.

DESIGN PARAMETERS

a. Location

- City Mumbai
- Latitude 19.7 °N
- Longitude 72.5 °E
- Altitude (meter) 14 (above mean sea level)

b. Outside Temperature

Following Outdoor Design Conditions have been considered from ISHRAE 2017 Handbook for 0.4% Occurrence

	Season	DBT (°F)	DBT (°C)	WBT (°F)	WBT (°C)	RH (%)
a.	Summer	95.2	35.1	73.9	23.2	36.9
b.	Monsoon	88.6	31.4	82.2	27.8	76.5
c.	Winter	59.7	15.4	56.3	13.5	81.5

c. Indoor Design Conditions

Following Indoor Design Conditions to be achieved for all the areas.

DBT	:	23± 1 °C (73.4°F)
RH	:	55 ± 5 % (No Control)

2) ELECTRICAL SYSTEM

DESIGN CRITERIA

- For Electrical Design
 - a Operating Voltage 3Ph/1Ph 415 V / 240V
 - b Frequency 50 Hz
 - c Equipment Earthing 2000 Earthing as per IS 3043-1987/IE Rules
 - d Short Circuit Fault Withstand Capacity As per Transformer and DG set rating
 - e Ambient temperature for Electrical design 40 °C
- For Extra Low voltage system
 - a Voltage 12/24 V or as applicable
 - b Source Main Incoming Supply

SOURCE OF POWER, SUPPLY AUTHORITY

Based on the estimated additional electrical demand for the VRF AC system and fire-fighting requirements, the project will be fed from the existing system. The additional electrical demand load, due to the new AC units, atrium, and fire pumps, is estimated to be 359 kW.

LT DISTRIBUTION

Supply connectivity from the main LT panel to other panels shall be provided using aluminum-armored XLPE-type cables. The electrical power supply from the DG to the fire pump is routed through aluminum-armored XLPE cables.

Voltage drop in the electrical system shall be limited to 6% at the farthest point (Utilization end) calculated from the main source of supply as per NBC 2016 guidelines.

All LT side cables will be FRLS Copper/ Aluminum Armoured XLPE type. However, all the Life Safety equipment shall be FS type cable. Type of cable will vary based on Fire NOC.

DISTRIBUTION BOARDS

Distribution Boards shall incorporate Miniature Circuit Breakers (MCB) of 10 kA minimum interrupting capacity for outgoing side, Residual Current Circuit Breaker (RCCB) of 30 mA for Sub Incomer side & MCB of 10 kA minimum interrupting capacity for incoming side.

POINT WIRING & CONTROLS

All existing light fixtures have been replaced with new LED lights, as approved by the architect/client. For point wiring existing distribution board (DB) to be used.

Point wiring for Light / Ceiling Fan / 6A Switch Socket Outlet / 16A Switch Socket Outlet/ Exhaust Fan etc. as per IS694-1990 ISI marked multi stranded copper conductor FRLS PVC insulated wires in Rigid PVC MMS conduit for concealed/ surface operation with ISI mark (IS-9537III) concealed in slab/wall or surface with suitable accessories. Earthing wire of min. 1.5 sq.mm PVC insulated shall be provided for all points.

Color code shall be maintained for the entire wiring installation that is Red, Yellow and Blue for the three phases, Black for neutral and Green with Yellow band for earthing. Besides provision of ferruling, number coding shall also be provided for easy identification for maintenance purposes.

EMERGENCY POWER SUPPLY

The DG capacity will be planned for fire loads during fire emergency operations. The required DG capacity is calculated to be 320 kVA DG set.

UNINTERRUPTIBLE POWER SUPPLY (UPS)

For emergency lighting, IBMS, and Server, the existing UPS should be considered. For the AV system, a separate UPS to be supplied by the AV system contractor. Storage batteries will be sealed maintenance free type. Battery backup shall be 90 minutes minimum for all UPS Loads.

EARTHING AND BONDING

Earthing for light and power points will be carried out with insulated copper earth wire running throughout the length of the circuit and will be terminated at equipment, fixtures, etc. with effective bonding to main earthing grid.

Separate and distinct earth stations with insulated electrode will be provided for the following system:

- Panels
- DG Set
- Pumps

All the pits and main earthing bars are to be connected to each other to make a common earthing electrode grid. If the resistivity of the soil is very high then, earthing calculations will be done to ensure that the conductivity is maintained at less than 1 Ω .

Plate earthing with 600x600x3mm tinned copper plate earthing as per IS 3043 with chamber inner size 300x300mm and connecting with 2nos, tinned copper strips of 25x3mm from plate to joint in the earth chamber with excavation in any soil salt, charcoal, earth chamber watering arrangement etc.

Electrical contractor shall measure the installed earthing value after completion of work during dry session to ensure the committed earth values are achieved. The earthing values shall be measured for both configurations at with Grid & at without grid values.

3) PLUMBING SYSTEM

Refurbishment/additional works for toilets shall be as per the detailed BOQs and layouts part of Tender Documents.

4) FIRE PROTECTION SYSTEM

Fire water tank capacity required is 200 KLD. Since present Fire tank capacity is less than required, additional external Fire Tank would be constructed. Necessary, piping connection with the existing Fire Tank to be carried out. Present pump room has main Fire Hydrant Pump, Hydrant Jockey pump and Diesel Pump. With addition of Sprinkler pump and its Jockey Pump, the Fire pump room to be rearranged with piping modifications.

Entire Building to have sprinkler system. Contractor to coordinate with all services.

5) EXTRA LOW VOLTAGE SYSTEM

Scope consists of Supply installation testing commissioning of ELV package includes but not limited to FAPA, BMS, CCTV, Security and IP Surveillance System, Access Control and Allied Works described in more detail in the Tender documents including co- ordination, scheduling and completion of overall works as per agreed milestone and overall Schedule.

C) AUDIO VIDEO SYSTEM

General Scope

This document defines the minimum requirements for the supply, installation, testing, commissioning, and programming of Audio-Visual systems as per Tender BoQ. The scope includes video display systems, audio systems, video conferencing, control systems, network equipment, and associated accessories. The contractor shall carry out the work in accordance with applicable international AVIXA standards, project specifications, and manufacturer recommendations.

Installation Requirements

- All AV equipment shall be installed in accordance with manufacturer installation manuals and coordinated with other services at site to avoid conflicts.
- Display panels must be wall or stand mounted using mounting solutions as specified, ensuring safety, alignment, and accessibility.
- Loudspeakers shall be installed to provide even sound coverage, avoiding audio dead zones.
- All cabling (audio, video, control, power) shall be run in structured conduits or trays, labelled clearly at both ends, and terminated at patch panels or wall plates as required.
- All rack-mounted equipment must be securely fixed, ventilated, and connected with appropriate cable management.
- Devices requiring network connectivity shall be configured on a VLAN segmented network with POE power where required.
- All system interconnections shall be verified for compliance with signal type and bandwidth (HDMI 2.0, Dante, USB-C, etc.).

Testing & Verification

- Verify each display and source for functionality, including resolution settings, color accuracy, and switching behaviour.

- Audio systems shall undergo pink noise testing, SPL balancing, and feedback suppression verification.
- Each microphone and wireless system must be tested for channel clarity, pairing integrity, and battery charging status.
- Network and AV over IP devices must be ping tested, bandwidth tested and configured per security protocols.
- All control signals must be verified for functionality from user interfaces (iPad, Crestron touch panels) to end devices.
- All failures or non-compliances must be documented and addressed prior to commissioning.

Commissioning Procedures

- A complete system walk-through shall be conducted with the client's representative.
- Each subsystem (display, audio, control, network) shall be tested end-to-end to demonstrate full operational readiness.
- Functional scenarios shall be run for each room configuration.
- Environmental conditions (heat, humidity, light) shall be validated for operational suitability.
- Commissioning report shall include performance test results, screenshots of configurations, and final cable schedules.

Programming & Configuration

- Control processor and associated keypads/interfaces shall be programmed to enable intuitive user control, scene-based switching, and error reporting.
- Audio DSPs shall be configured with gain structures, equalization, matrix routing, and acoustic echo cancellation.
- Signage players and media processors shall be programmed for scheduled content playback, synchronized outputs, and failover protocols.
- Network switches shall be configured for VLAN segregation, QoS settings for AV traffic, and secured access credentials.
- All firmware updates for AV devices shall be completed and documented with versioning.
- Backup configurations for each programmable device shall be stored and handed over on secure digital media.

Documentation & Training

- Provide a complete set of as-built drawings including cable routes, termination diagrams, rack elevations, and device locations.
- Submit operation manuals, maintenance guides, and licensing information.
- Provide structured training sessions for technical staff and end-users with sign-in sheets and agendas.
- Handover shall include system passwords, firmware backups, and source code for custom programming.

Compliance & Handover

- All works must comply with international AVIXA AV standards and local safety regulations.
- A final acceptance test shall be performed and witnessed by the client.
- All snags and non-conformities must be closed and signed off before final handover.
- Warranty certificates and manufacturer support contact details must be provided at handover.
- Final sign-off requires full operational readiness and end-user satisfaction confirmation.

D) LIGHTING

Scope of Services

The contractor's scope includes but is not limited to the following:

Supply and Delivery

- Supply of all lighting fixtures as per BOQ and approved makes.
- Delivery of materials to site with proper packaging and documentation.
- Provision of test certificates, compliance reports, and warranty documentation.

Installation

Installation of lighting fixtures (indoor and outdoor) including:

- Ceiling-mounted lights - Wall-mounted lights - Recessed lights - Pendant lights - Landscape lighting - Street/pole lighting (if applicable)
- Fixing supports, brackets, and accessories as required.
- Conduiting, wiring, cabling, and termination for lighting circuits (By MEP/Electrical Consultant).
- Mounting and alignment as per design drawings and lighting layout plans.

Testing and Commissioning

- Functional testing of all lighting points and circuits.
- Load testing and voltage verification.
- Lux level measurement and validation.
- Rectification of any faults or non-conformance issues.
- Submission of test reports and commissioning certificates.

Coordination and Compliance

- Coordination with MEP, civil, and interior contractors to avoid conflicts.
- Ensuring adherence to local electrical codes, fire safety norms, and project specifications.
- Comply with approved shop drawings and submittals.

Documentation

Submission of:

- Product datasheets and brochures for approval - Shop drawings and installation layouts - As-built drawings - Operation & Maintenance (O&M) manuals - Warranty certificates

Warranty and Maintenance

- Provide a minimum 2-year warranty for workmanship and 5 years for supplied lighting fixtures.
- Defect liability support and on-call service during the warranty period.

E) LIGHTING AUTOMATION SYSTEM

The scope of work involves the Supply, Installation, Testing, and Commissioning of the complete Lighting Automation System.

Supply & Layout Coordination:

- The Automation Vendor will supply all Lutron proprietary cables.
- The Electrical Contractor will be responsible for laying these cables as per the layout drawings provided by the Automation Vendor.

Cabling Works:

- DALI Looping Cables and Phase Dimming Looping Cables shall be procured and laid by the Electrical Contractor in accordance with the approved wiring schematics.

Installation Responsibilities:

- The Automation Vendor will undertake the installation and termination of all automation components at the site.

Commissioning:

- The Automation Vendor shall perform the complete commissioning and programming of the Automation System to ensure full functionality as per the design intent.

F) SIGNAGE

- All Signage (Internal, Fire etc.) shall be of Modular Aluminium extrusions (Alloy 6060 as per European standards EN755-2-2008 tensile strength 190 MPa typical BHN is 70 from virgin aluminium homogeneous billet) with premium grade anodizing (Thickness 15-20 microns) bronze finish as per international standards, with 10 years warranty under normal working conditions

2.4 Definitions

In this document the following words and expressions have the meaning hereby assigned to them.

- (a) Employer Means the Director IITB, acting through the Superintending Engineer (Estate Office).
- (b) Bidder Means the individual proprietary firm, firm in partnership, limited company private or public or corporation.
- (c) Year means "Financial Year" unless stated otherwise.
- (d) Composite Work means work includes, in addition to building work, all other construction works and services such as sanitary and water supply, drainage, electrical, mechanical, development works like retaining walls, horticulture, roads and paths, furniture etc.

- (e) Major Works means the construction scope of Civil, interior, Furniture and Plumbing Works.
- (f) Minor Works means the construction scope of Mechanical, Electrical, Airconditioning and Mechanical ventilation works including Laboratory furniture, fume hoods, clean rooms, GDS and HVAC exhaust systems.
- (g) Composite Tender means the Tender for Composite Work which includes the construction scope of Major and Minor Works including specialised works.
- (h) Tendered Amount means the Total Tendered Amount after affecting the Percentage quoted below or above the Estimated Cost plus the applicable GST which is as per Part D-1 of the Tender.

Bidding Methodology

Bids are being invited from the Pre-Qualified Bidders for the renovation of an Academic/institutional Building inside IIT Bombay Campus. This Tender is a composite Tender consisting of General Conditions of Contract, plans, general and particular specifications, schedule of quantities of various types of items of the work to be executed, approved makes etc. for submission of the Financial Bid.

3. Instructions and Information to the Bidders

- 3.1 For any queries, send an Email to Executive Engineer (ACL), Estate office exengr.civil@iitb.ac.in and drestate@iitb.ac.in and copy to Program management consultancy (Will be notified after appointment).
- 3.2 Venue for all personal interactions related to this Tender is Office of Superintending Engineer, Estate Building, 1st floor, IIT Bombay, Powai, Mumbai 400 076.
- 3.3 Entire Bid Document shall be submitted in total three (3) envelopes suitably superscribed as below:
 - (i) Envelope 1 – EMD
 - (ii) Envelope 2: Technical Bid consisting of duly filled, signed and stamped Check List (para 5.2) and all the documents indexed, page numbered and spiral binded in the order and as elaborated in Sl No. 2 to 4 of the Check List. Envelope shall also include the Prebid Clarifications and amendments issued duly signed and stamped by the Bidder.
 - (iii) Envelope 3: Financial Bid (Part D1 & D2) duly signed and stamped all pages by the Bidder
- 3.4 Last Date & time for physical submission of the Bid Documents to Office of Superintending Engineer, Estate Building, IITB Campus, Powai, Mumbai 400 076 on or before the date as per Para 1.2 above.
- 3.5 Tender shall be opened on the pre intimated date & time (refer Para 1.2 above) in the office in presence of the Bidder representatives who may be present at Superintending Engineer, Estate Building, IIT Bombay Campus, Powai, Mumbai 400 076.
- 3.6 General Guidelines
 - a. The bid should be type written / neatly hand written. The bidder should sign each page of the bid.
 - b. Over writing should be avoided. Correction, if any, should be made by neatly crossing out, initialling, dating and rewriting. Pages of the Bid document are numbered. Additional sheets, if any, added by the Contractor, should also be

numbered by him. These should be submitted as a package with signed letter of transmittal.

3.7 Method of Application

- a. If the bidder is an individual, the bid shall be signed by him above his full typewritten name with current address.
- b. If the bidder is a proprietary firm, the bid shall be signed by the proprietor above his full typewritten name and the full name of his firm with its current address.
- c. If the bidder is a firm in partnership, the bid shall be signed by all the partners of the firm above their full typewritten names and current addresses or alternatively by a partner holding power of attorney for the firm. In the latter case, a certified copy of the power of attorney should accompany the bid. In both cases a certified copy of the partnership deed and current address of all the partners of the firm should accompany the application.
- d. If the bidder is a limited company or a corporation, the bid shall be signed by a duly authorized person holding power of attorney for signing the bid accompanied by a certified copy of the power of attorney. The bidder should also furnish a copy of this memorandum of Articles of Association duly attested by a public Notary.

3.8 Final decision-making Authority

The employer (IITB) reserves the right to accept or reject any bid and to annul the bidding process and reject all bids at any time, without assigning any reason or incurring any liability to the bidders.

3.9 Opening of Price Bid

The Bids submitted by the Pre-Qualified Bidders on the specified date and time as per Para 1.2 shall be opened on the date and time indicated in Para 1.2 in presence of qualified bidders or their representatives.

After opening of the Technical Documents, the deficiencies found in the bid of each Pre-Qualified bidder vis -a -vis requirements as per NIT will be communicated to individual bidders by email with a request to furnish required documents within Three working days of receipt, failing which it will be presumed that the individual bidder do not have any further documents to furnish and decision on bids will be taken accordingly.

3.10 Validity of the Bid

The bid submitted by the Pre-Qualified Bidders shall remain valid for a period of **120 days** from the due date of submission / extended date of submission.

3.11 Award Criteria: The employer reserves the right, without being liable for any damages or obligation to:

- a. Amend the scope and value of Contract to the bidder.
- b. Reject any or all the applications without assigning any reason.
- c. Any effort on the part of the bidder or his agent to exercise influence or to pressure the employer would result in rejection of his bid. Canvassing of any kind is prohibited.

3.12 Agreement shall be drawn with the successful bidders on prescribed standard forms. Bidder shall quote his percentage and amount thus worked out shall be as per various terms and conditions of the said form which will form part of the agreement.

3.13 The time period for carrying out the work shall be as per the Para 1.2 under this Section which shall be from the date of start as defined in schedule 'F' or from the first date of

- handing over of the site, whichever is later, in accordance with the phasing, if any, indicated in the tender documents.
- 3.14 The site for the work is available. Preliminary architectural and structural drawings for the work are available; however, Good for Construction (GFC) drawings shall be issued soon after award of the work.
- 3.15 The Bid documents / Tender documents consisting of plans, specifications, schedule of quantities of various types of items of work to be executed, specifications and the set of terms and conditions of the Contract etc. to be complied shall be provided electronically to the Pre-Qualified Bidders.
- 3.16 Bid shall be physically submitted by the Pre-Qualified Bidders in the office of Superintending Engineer (Estate Office) on the date and time as per Para 1.2.
- 3.17 The bid submitted are liable to become invalid if:
- a. The bidder does not submit EMD
 - b. The bidder does not submit all the documents as per the bid document.
- 3.18 EMD amount as specified in Para 1.1 is to be submitted along with the Bid documents in any of the following forms:
- a. Banker's Cheque of a Commercial Bank
 - b. Account Payee Demand Draft (DD) of a Commercial Bank
 - c. Fixed Deposit Receipt (FDR) of a Commercial Bank
 - d. A part of earnest money is acceptable in the form of Bank Guarantee including e-Bank Guarantee also. In such cases 50% of earnest money or Rs. 20 lakh whichever is less, will have to be deposited in shape prescribed above and balance can be accepted in form of Bank Guarantee issued by a Commercial Bank.
- 3.19 The original EMD receiving authority releases the EMD to unsuccessful bidders within one week after acceptance of the successful bid. EMD shall be refunded to the successful Bidder on receipt of Performance Guarantee submitted on award of the work.
- 3.20 BG / Bankers Cheque / Pay Order/ DD / FDR / Bonds shall be drawn in favour of Registrar, Indian Institute of Technology Bombay, Payable at Mumbai.
- 3.21 The Bidder whose bid is accepted shall also furnish either copy of applicable licenses/ registrations or proof of applying for obtaining labour licenses, registration with EPFO, ESIC and BOCW Welfare Board including Provident Fund Code No. If applicable and also ensure the compliance of aforesaid provisions by the subcontractors, if any engaged by the Contractor for the said work within the period specified in Schedule F.
- 3.22 The Bidder whose bid is accepted will also be required to furnish Programme Chart (Time and Progress using PRIMAVERA) within the period as specified in Schedule F.
- 3.23 Intending Bidders are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their bids as to the nature of the ground and subsoil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their bid. A bidder shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charge consequent on any misunderstanding or otherwise shall be allowed. The bidders shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the Contract documents. Submission of a bid by a bidder implies that he has read this notice and all other Contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which stores, tools and

- plant, etc. will be issued to him by the IITB and local conditions and other factors having a bearing on the execution of the work.
- 3.24 The competent authority on behalf of Director IITB reserves to himself the right of accepting the whole or any part of the bid and the bidders shall be bound to perform the same at the rate quoted.
- 3.25 The Bidder shall not be permitted to bid for works in the IITB, in which his near relative is posted a Divisional Accountant or as an officer in any capacity between the grades of Superintending Engineer and Junior Engineer (both inclusive). He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any officer in the IITB. Any breach of this condition by the Contractor would render him liable to be removed from the approved list of contractors of this Institute/IITB.
- 3.26 This notice inviting Bid shall form a part of the Contract document. The successful bidder / contractor, on acceptance of his bid by the Accepting Authority shall within 15 days from the stipulated date of start of the work, sign the Contract consisting of the Prequalification Bid submitted by the Bidder along with the Pre-Bid queries, amendments etc. issued as part of the Pre-Qualification Bid, Bid submitted for The Notice Inviting Tender, all its constituents including Additional and Special Conditions, Specifications, Particular specifications , Drawings, etc. forming part of the bid as uploaded at the time of invitation of bid and the rates quoted at the time of submission of bid and acceptance thereof together with any correspondence leading thereto.
- 3.27 On acceptance of the tender, the name of the accredited representative(s) of the Contractor who would be responsible for taking instructions from the Engineer-in-Charge shall be communicated in writing to the Engineer-in-Charge.
- 3.28 GST or any other tax applicable in respect of inputs procured by the Contractor for this Contract shall be payable by the Contractor and IITB will not entertain any claim whatsoever in respect of the same. However, component of GST at time of supply of service (as provided in CGST Act 2017) provided by the Contract shall be varied if different from that applicable on the last date of receipt of tender including extension if any.
- 3.29 In this Percentage Rate Tender, the tenderer shall quote percentage below/above (in figures as well as in words) at which he will be willing to execute the work. He shall also work out the total amount of his offer and the same should be written in figures as well as in words in such a way that no interpolation is possible. In case of figures, the word 'Rs.' Should be written before the figure of rupees and word 'P' after the decimal figures, e.g. 'Rs. 2.15 P and in case of words, the word 'Rupees' should precede and the word 'Paisa' should be written at the end.
- 3.30 The Contractor whose tender is accepted, will be required to furnish performance guarantee of 5% (Five Percent) of the Tendered Amount within the period specified in Schedule F. This guarantee shall be in the form of cash (in case guarantee amount is less than Rs. 10,000/-) or Deposit at call receipt of any scheduled bank/Banker's cheque of any scheduled bank/Demand Draft of any scheduled bank/Pay order of any scheduled bank (in case guarantee amount is less than Rs. 1,00,000/-) or Government Securities or Fixed Deposit Receipts or Guarantee Bonds of any Scheduled Bank.
- 3.31 The contractor whose tender is accepted will also be required to furnish by way of Security Deposit for the fulfilment of his Contract, an amount equal to 5% of the tendered value of the work. The Security deposit will be collected by deductions from the running bills as well as final bill of the contractor at the rates mentioned above. The Security amount will also be accepted in cash or in the shape of Government Securities. Fixed Deposit Receipt of a Scheduled Bank or will also be accepted for this purpose provided confirmatory advice is enclosed.

- 3.32 Performance Bank Guarantee and Security Deposit Bank Guarantee as per the Clause 1 and Clause 1A of Clauses of the Contract respectively shall be drawn in favour of Registrar, Indian Institute of Technology Bombay payable at Mumbai.
- 3.33 The tender submitted shall be treated as invalid if the Bidder does not quote percentage above/below on the total amount of tender or any section/sub head of the tender.
- 3.34 Tenders, which propose any alteration in the work specified in the said form of invitation to tender, or in the time allowed for carrying out the work, or which contain any other conditions of any sort including conditional rebates, will be summarily rejected.
- 3.35 Forfeiture of Earnest Money
1. (i) If any tenderer withdraws his tender or makes any modification in the terms & conditions of the tender which is not acceptable IITB within 7 days after last date of submission of bids, then the IITB shall without prejudice to any other right or remedy, be at liberty to forfeit 50% of earnest money absolutely irrespective of letter of acceptance for the work is issued or not.
(ii) If any tenderer withdraws his tender or makes any modification in the terms & conditions of the tender which is not acceptable to the department after expiry of 7 days after last date of submission of bids, then the IITB shall without prejudice to any other right or remedy, be at liberty to forfeit 100% of the earnest money absolutely irrespective of letter of acceptance for the work is issued or not.
 2. If contractor fails to furnish the prescribed performance guarantee within the prescribed / extended period, the earnest money is absolutely forfeited to the IITB automatically without any notice.
 3. In case of forfeiture of earnest money as prescribed in Para (1) and (2) above, the bidder shall not be allowed to participate in the re-tendering process of the work.
- 3.36 In case the lowest Tendered Amount (estimated cost + amount worked on the basis of percentage above/below) of two or more contractors is same, such lowest contractors will be asked to submit sealed revised offer in the form of letter mentioning percentage above/below on estimated cost of tender including all sub sections/sub heads as the case may be, but the revised percentage quoted above/below on tendered cost or on each sub section/sub head should not be higher than the percentage quoted at the time of submission of tender. The lowest tender shall be decided on the basis of revised offers. In case any of such Bidder refuses to submit revised offer, then it shall be treated as withdrawal of his tender before acceptance and 50% of earnest money shall be forfeited.
- 3.37 If the revised Tendered Amount of two more contractors received in revised offer is again found to be equal, the lowest tender, among such contractors, shall be decided by draw of lots in the presence of Director (IITB) or his Authorised Representative & the lowest contractors those have quoted equal amount of their tenders.
- 3.38 In case all the lowest Bidder those have quoted same Tendered Amount, refuse to submit revised offers, then tenders are to be recalled after forfeiting 50% of EMD of each Bidder. Bidder (s), whose earnest money is forfeited because of non- submission of revised offer, shall not be allowed to participate in the re-tendering process of the work.
- 3.39 For Composite Bids
- a. The quoted percentage of the bidder shall be applicable for all items of major component as well as minor components of work.
 - b. After acceptance of the bid by competent authority, the Superintending Engineer (Estate Office) IITB shall issue letter of award of work on behalf of Director IITB. After the work is awarded, the Contractor shall have to enter into an agreement with IITB.
 - c. Entire work under the scope of composite bid including major and all minor components shall be executed under one agreement.

- d. The Contractor has to associate agency(s) for minor component(s). Name of the agency(s) to be associated shall be approved by Superintending Engineer (Estate Office).
- e. In case the Contractor intends to change any of the above agency/agencies during the operation of the Contract, he shall obtain prior approval of Superintending Engineer (Estate Office).
- f. The Contractor has to enter into agreement with sub-contractor(s) associated by him for execution of minor component(s). Copy of such agreement shall be submitted to Superintending Engineer (Estate Office). In case of change of such associate contractor, the Contractor has to enter into agreement with the new sub-contractor associated by him.
- g. The Contractor shall prepare detailed execution programme of the work which forms part of his agreement with the IITB in the event of the award. He shall indicate in the programme, the time/stage of the work when the agencies of specialized components of works will be deployed by him.
- h. Running payment for the works done and measured shall be made by Superintending Engineer (Estate Office) to the Contractor on basis of Quoted Percentage above or below on The Estimated Cost of each item.
- i. The composite work shall be treated as complete when all the components of the work are completed and handed over. The completion certificate of the composite work shall be recorded by Superintending Engineer (Estate Office) after record of completion certificate of all other components.
- j. Final bill of whole work shall be finalized and paid by the Superintending Engineer (Estate Office).
- k. The completion certificate of the work shall be recorded by Superintending Engineer (Estate Office).
- l. All requirements shall be as per the NIT provisions.

3.40 List of the documents to be submitted by the Bidders within the period of bid submission listed as below:

- 1. Envelope No 1: EMD amount as specified in Para 1.1 to be submitted in a separate envelope superscribed 'EMD' in the form elaborated in Para 3.20.
- 2. Envelope No 1: Shall be the Technical Bid consisting of duly filled, signed and stamped Check List (para 5.2) and all the documents indexed, page numbered and spiral binded in the order and as elaborated in SI No. 1 and 2 of the Check List.
- 3. Envelope No 2: Shall be of Commercial Bid consisting the following duly signed and stamped by the Bidder.
 - a. Part D1 : Percentage quote on Estimated Amount
 - b. Part D2 : Bill of Quantities (BOQ)

Initial Criteria for Eligibility

Tenders shall be considered from eligible contractors who have satisfied eligibility criteria as specified in the tender, vide documents to be submitted in Envelope-2 of the Tender subject to producing definite proof (from the appropriate authority which shall be to the satisfaction of the competent authority) of having satisfactorily completed similar works of magnitude specified hereinafter.

Joint ventures and Special Purpose vehicles are not accepted.

Should have completed the works as mentioned below during the last **Seven (7)** years ending previous day of last date of submission of tenders.

- a. Three Similar Works each costing not less than Rs. **9,56,04,368/-** (excluding GST)
or
- b. Two Similar Works each costing not less than that Rs. **14,34,06,552/-** (excluding GST)
or
- c. One Similar Work costing not less than Rs **19,12,08,736/-** (excluding GST)
and
- d. One building construction work of any nature either from the above or separately carried out of which cost is not less than Rs. **9,56,04,368/-** with any Central or State Government / Central or State Autonomous Body/ Central or State Public Sector Undertaking
and
- e. Completed at least one commercial/ institutional building work involving interior civil finishing work, PHE works, electrical works, ELV works, Firefighting works, HVAC works, Audio-video system, lighting management system, furniture & signages during last 5 (five) years in single contract agreement.

Similar Work shall mean 'the **commercial/ institutional** building consisting of RCC Framed Structure having minimum five (5) storey including Finishing works, toilet repair, internal Water Supply & Sanitary installations, Internal Electrical Installation and Firefighting (Wet Riser / Down comer) system, all executed under one agreement / contract'. Each basement, stilt / ground floor constructed in the building shall be considered as a storey.

The value of executed works shall be brought to current costing level by enhancing the actual value of work at simple rate of 7% per annum; calculated from the date of completion to previous day of last day of submission of tenders.

Bidders are advised to submit copy of Agreement / final bill or any other relevant document in support of their proposed completed work (s) which conforms to the definition of similar work.

In case of private works, the same shall be supported by TDS certificate for the work(s) under consideration.

Turnover: Should have average annual financial turnover of **Rs. 7,05,08,221/-** on construction works during the immediate last 5 consecutive financial years ending 31st March 2025. The value of annual turnover figures shall be brought to the current value by enhancing the actual turnover figures at simple rate of 7% per annum.

Profit / loss: Should not have incurred any loss (profit after tax should be positive) in more than two years during available last five consecutive balance sheet (balance sheet in case of private/public limited company means its standalone financial statement and consolidated financial statement both), duly audited and certified by the Chartered Accountant with UDIN.

Bidding Capacity: Should have bidding capacity equal to or more than the estimated cost of the work put to tender. The bidding capacity shall be worked out by the following formula:

$$\text{Bidding Capacity} = \{[A \times N \times 2] - B\}$$

Where,

A = Maximum turnover in construction works executed in any one year during the last seven years taking into account the completed as well as works in progress. The value of completed works shall be brought to current costing level by enhancing at a simple rate of 7% per annum.

N = Number of years prescribed for completion of work for which bids have been invited.

B = Value of existing commitments and ongoing works to be completed during the period of completion of work for which bids have been invited.

Note: The bidder shall submit bidding capacity as per Form 'C-3'.

Banker's Certificate from a Commercial Bank or Net worth Certificate:

Should have Banker's Certificate of the amount equal to Rs **9,56,04,368/-**

or

Net worth certificates of minimum Rs **2,39,01,092/-** issued by certified Chartered Accountant with UDIN.

Financial Information

Bidder shall furnish Annual financial statement for the last five years (in the Form "A") and solvency certificate (in form "B").

Experience in Works, highlighting the experience in Similar Works.

List of eligible Similar Work successfully completed during the last seven years in the Form "C" along with ongoing works in Form C-1.

Performance report of works referred in form "C" shall be submitted in the form of 'Form "D" signed by officer not below the rank of Executive Engineer /Project Manager or equivalent.

Organisation information: Bidder shall submit information in respect to his organization (in the Form "E").

Affidavit for not black listed by any bodies shall be submitted as per Form "F".

Eligibility Letter of Transmittal shall be submitted in the format provided in Para 4.30.1.

The value of executed works shall be brought to current costing level by enhancing the actual value of work at simple rate of 7% per annum, calculated from the date of completion to previous day of last date of submission of tenders.

Bids of those Bidders who meet the eligibility criteria para 4.1 to 4.13 will be evaluated for Quality / safety / schedule / performance evaluation of completed / ongoing works etc. by an Evaluation committee constituted by the Director, IIT Bombay based on the following parameters. The bidder shall get minimum 60% of the allocated marks for each category of the following parameters and also shall get over all 75% to qualify for opening of Financial Bid.

- a. Quality/safety performance based on one completed Similar Work -20 marks.
- b. Quality/safety performance of ongoing composite building construction works – 20 marks.
- c. Schedule performance of the current and past works, in the last 5 works – 20 marks.

- d. Resources including manpower, equipment software etc. with the agency to be made available for deploying at site - 20 marks.
- e. Demonstration of capabilities of having undertaken similar projects under local by-laws / working environment using local resources etc.- 20 marks

The bidder shall submit documents/report detailing each of the above signed by the authorized signatory and should be part of the bid.

The Bidders shall be subject to thorough verification by the Technical Evaluation Committee constituted by IITB of their credentials, inspection of ongoing / completed construction works or both at the discretion of IITB for quality (form D-1 for reference), safety, time schedules and execution methodologies, office establishment and facilities etc. The performance reports from the Authorities to whom the works are being executed or completed shall also become part of the technical evaluation.

Responsibility of obtaining necessary permissions from the respective Authorities to visit the Bidders ongoing / completed construction works for inspection by the IITB Technical Evaluation Committee lies with the Bidder.

The bidder shall submit documents/report detailing each of the above signed by the authorized signatory and shall be part of the bid.

To become eligible, the bidders shall have to furnish and affidavit, duly signed and stamped, as Under:

"I / We undertake and confirm that eligible similar work(s) has/have not been got executed through another contractor on back-to-back basis. Further that, if such a violation comes to the notice of Superintending Engineer (Estate Office), then I/We shall be debarred for tendering in IITB in future forever. Also, if such violation comes to the notice of Superintending Engineer (Estate Office) before date of start of work, the Superintending Engineer (Estate Office) shall be free to forfeit the entire amount of EMD / Performance guarantee."

The intending bidder must read the terms and conditions as spelt out in this NIT document. He should only submit his bid if he considers himself eligible and he is in possession of all the documents required.

All the taxes as applicable shall be borne by the Contractor himself. The Bidder shall quote his tendered amount considering all such taxes and hence their tendered amount should be inclusive of all the tax components. Goods and Service tax (GST) shall be indicated separately.

Information and Instruction for bidders posted on website shall form part of bid document.

The bid document consisting of plans / drawings, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the Contract to be complied with the Contractor whose bid may be accepted, and other necessary documents can be seen on <https://www.iitb.ac.in/deanpl/tender.html> Central Public Procurement Portal (CPPP) website <https://eprocure.gov.in/eprocure/app> and <https://www.iitb.ac.in/resources/vendors-tenders> .

Tender should be submitted along with original EMD. EMD should be submitted in separate envelope super scribed 'EARNEST MONEY DEPOSIT'.

Certificate of Financial Turn over: At the time of submission of bid, Bidder has to Submit Affidavit/Certificate from CA mentioning Financial Turnover of last 5 years and further details if required may be asked from the Bidder after opening of eligibility bids. There is no need to submit entire voluminous balance sheet.

Tenderer shall ensure to quote percentage against estimated cost put to tender.

The Eligibility bid shall be opened first on due date and time as mentioned above (Refer to Para no. 1.2 above). The time and date of opening of financial bid of tenderers qualifying the eligibility bid shall be communicated to them at a later date.

The building is targeted for minimum 3 Star GRIHA rating from TERI. The bidders shall provide all necessary support and required facilities in order to secure this rating. Nothing extra on this account shall be payable.

IITB reserves the right to reject any prospective Tender without assigning any reason and to restrict the list of qualified Tenderers to any number deemed suitable by it, if too many bids are received satisfying the laid down criterion.

EMD amount as specified in Para 1.1 in the form elaborated in Para 3.20, shall be drawn in favour of Registrar Indian Institute of Technology, Bombay, payable at Mumbai.

Information pertaining to any additions, changes, modifications including Record notes of Pre-Bid meeting etc. shall be uploaded on the official websites and no separate communication shall be made in this regard. Bidders are advised to regularly check websites for further Information/Communication.

It will be obligatory on part of the tenderer to sign and stamp the tender documents for all the components (Schedule of Quantities, General Terms & conditions, Special Terms & Conditions and Performa Schedules including additions, changes, modifications, Record notes of Pre-Bid meeting, addendums and amendments to the Tender etc.).

3.41 **FORMS / FORMATS**

Form of Earnest Money Deposit -Bank Guarantee Bond (On nonjudicial stamp paper of minimum Rs. 100)

1. Whereas the Superintending Engineer (Estate Office), Indian Institute of Technology Bombay (herein after called the Superintending Engineer (Estate Office)) on behalf of Indian Institute of Technology Bombay (herein after called the IITB) has invited bids under (NIT number)..... Dated for (name of work) IITB has further agreed to accept irrevocable Bank Guarantee for Rs. (Rupees only) valid up to (date)*... as Earnest Money Deposit from (name and address of contractor) (hereinafter called “the Contractor”) for compliance of his obligations in accordance with the terms and conditions of the said NIT.
2. We, (indicate the name of the bank) (herein after referred to as “the Bank”), hereby undertake to pay to the IITB an amount not exceeding Rs. (Rupees..... only) on demand by the IITB within 10 days of the demand.
3. We,(indicate the name of the Bank)....., do here by undertake to pay the amount due and payable under this guarantee without any demur, merely on a demand from the IITB stating that the amount claimed is required to meet the recoveries due or likely to be due from the said Contractor. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this Guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. (Rupees only).
4. We, (indicate the name of the Bank), further undertake to pay the IITB any money so demanded notwithstanding any dispute or disputes raised by the Contractor in any suit or proceeding pending before any Court or Tribunal, our liability under this Bank Guarantee being absolute and unequivocal. The payment so made by us under this Bank Guarantee shall be a valid discharge of our liability for payment there under and the Contractor shall have no claim against us for making such payment.
5. We, (indicate the name of the Bank), further agree that the IITB shall have the fullest liberty without our consent and without affecting in any manner our obligation here under to vary any of the terms and conditions of the said agreement or to extend time of performance by the said Contractor from time to time or to postpone for any time or from time to time any of the powers exercisable by the IITB against the said Contractor and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said Contractor or for any forbearance, act of omission on the part of the IITB or any indulgence by the IITB to the said Contractor or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.
6. We, (indicate the name of the Bank) , further agree that the IITB at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor at the first instance without proceeding against the Contractor and notwithstanding any security or other guarantee the IITB may have in relation to the Contractor’s liabilities.

7. This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor.
8. We, (indicate the name of the Bank) , undertake not to revoke this guarantee except with the consent of the IITB in writing.
9. This Bank Guarantee shall be valid up to unless extended on demand by the IITB. Notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs. (Rupees only) and unless a claim in writing is lodged with us within the date of expiry or extended date of expiry of this guarantee, all our liabilities under this guarantee shall stand discharged.

Date

Witnesses:

1. Signature..... Authorized signatory
Name and address Name

Designation

Staf Code no.

2. Signature Bank seal
Name and address

*Date to be worked out on the basis of validity period of **180 days** from the date of submission of the tender.

5. Percentage Tender and Contract for Works:

I/We have read and examined the notice inviting tender, schedule A, B, C, D, E & F, Specifications applicable, Drawings & Designs, General Conditions of Contract with Pre-Bid Clarifications and Amendments up to the last date of submission of tenders, Technical Specifications as per CPWD, General Conditions of the Contract, Special conditions of the Contract, Schedule of Rate & other documents and Rules referred to in the Conditions of the Contract and all other contents in the Tender document for the work **“Comprehensive interior upgradation and refurbishment of auditorium, seminar rooms, conference room, atrium and VIP lounge including civil furniture, PHE, MEP, HVAC and LMS works of Victor Menezes convention centre at IIT Bombay Powai, Mumbai – 400076.”**

- a. I/We hereby tender for the execution of the work specified for the IITB within the time specified in Schedule 'F' in accordance in all respect with the specifications, designs, schedule of quantities, drawing and instructions in writing referred to in Rule-1 of General Rules and Directions and in Clause 11 of the Conditions of Contract with amendments up to the last date of submission of tenders and with such materials as are provided for ,by, and in respect of accordance with, such conditions so far as applicable.
- b. We agree to keep the tender open for One Twenty (120) days from the date of /extended bid submission and not to make any modification in its terms and conditions.
- c. A sum of Rs_____ is hereby forwarded in cash/receipt treasury challan/deposit at call receipt of a scheduled bank/fixed deposit receipt of scheduled bank/demand draft of a scheduled bank/bank guarantee issued by a scheduled bank as earnest money.
- d. If I/We, fail to furnish the prescribed performance guarantee within prescribed period, I/We agree that the said IITB, shall without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money absolutely. Further, if I/We fail to commence work as specified, I/ We agree that IITB shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the said performance guarantee absolutely. The said Performance Guarantee shall be a guarantee to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to those in excess of that limit at the rates to be determined in accordance with the provision contained in Clause 12.2 and 12.3 of the General Conditions of the Contract.
- e. Further, I/We agree that in case of forfeiture of Performance Guarantee or committing such breach as aforesaid, I/We shall be debarred for participation in the re-tendering process of the work.
- f. I/We undertake and confirm that eligible similar work(s) has/have not been got executed through another Contractor on back-to-back basis. Further that, if such a violation comes to the notice of IITB, then I/We shall be debarred for tendering in IITB in future forever. Also, if such a violation comes to the notice of IITB before date of start of work, Superintending Engineer (Estate Office) shall be free to forfeit the entire amount of Performance Guarantee.
- g. I/We hereby declare that I/We shall treat the tender documents drawings and other records connected with the work as secret/confidential documents and shall not communicate information /derived there from to any person other than a person to whom I/We am/are authorized to communicate the same or use the information in any manner prejudicial to the safety of the State.

Dated:.....

Signature with stamp of the Bidder:.....

Address:

Postal Address:.....

Position:

Witness Signature:

Witness name and address:

(Blanks to be filled by the Bidder)

5.1 IITB Acceptance

The above tender (as modified by you as provided in the letters mentioned here under) is accepted by me for an on behalf of Director IITB for a sum of Rs.

.....(Rupee.....).

The letters refer red to below shall form part of this Contract agreement:

(a)

(b)

For & on behalf of

Signature.....

Dated:

Designation.....

(Blanks to be filled by Superintending Engineer (Estate Office))

5.2. Check list:

Bidder shall follow and submit their Bid, indexed, page numbered and checked in the order as per the below Check List indicating the submission (Yes / No, by striking the not applicable). Bidder shall also submit any other specific instructions in the NIT as part of the Bid which shall also be included in the Check List.

Sr. No.	Eligibility and Technical Documents	Submittal status		Page No.	Submitted under
		Yes	No		
1	EMD in the prescribed form	Yes	No		Envelop 1
2	Submission of signed and stamped all the components of the Tender document (NIT, Schedule of Quantities, General Terms & conditions, Special Terms & Conditions, Additional / Particular Specifications, Approved / Recommended manufacturers and specialised agencies, Performa Schedules including additions, changes, modifications, Record notes of PreBid meeting, addendums and amendments to the Tender, mandatory approvals, Geotechnical, Field and Topographic Survey reports etc.)	Yes	No		Envelop 1
3	Percentage Tender and Contract for works duly signed and stamped	Yes	No		Envelop 2
4	Integrity Pact duly signed and stamped as per Part A-2 : Conditions of the Contract	Yes	No		Envelop 2
5	Part D-1 duly filled, signed and stamped	Yes	No		Envelop 2
6	Part D-2 , signed and stamped	Yes	No		Envelop 2

Dated:.....

Signature with stamp of the Bidder:.....

PART A-2: CONDITIONS OF THE CONTRACT

GENERAL CONDITIONS OF THE CONTRACT**INDEX**

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Part A-2, Conditions of Contract

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2, General Conditions of the Contract - Index

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6. GENERAL CONDITIONS OF THE CONTRACT:

6.1 Definitions

The **Contract** means the documents forming the tender and acceptance thereof and the formal agreement executed between the competent authority on behalf of the Director of Indian Institute of Technology Bombay and the Contractor, together with the documents referred to therein including these conditions, the specifications, designs, drawings and instructions issued from time to time by the Engineer-in-Charge and all these documents taken together, shall be deemed to form one Contract and shall be complementary to one another.

1. In the Contract, the following expressions shall, unless the context otherwise requires, have the meanings, hereby respectively assigned to them: -
 - a. The expression works **or work** shall, unless there be something either in the subject or context repugnant to such construction, be construed and taken to mean the works by or by virtue of the Contract contracted to be executed whether temporary or permanent, and whether original, altered, substituted or additional.
 - b. The **Site** shall mean the land, places on, into or where work is to be executed under the Contract or any adjacent land, path or street or where work is to be executed under the Contract or any adjacent land, path or street which may be temporarily allotted or used for the purpose of carrying out the Contract.
 - c. The **Contractor** shall mean the individual, firm or company, whether incorporated or not, undertaking the works and shall include the legal personal representative of such individual or the persons composing such firm or company, for the successors of such firm or company and the permitted assignees of such individual, firm or company.
 - d. The **Institute/IITB** means Indian Institute of Technology Bombay an Autonomous institute of Government of India
 - e. The **Director** means Director of Indian Institute of Technology Bombay and his successors.
 - f. The **Engineer-in-charge** means the Superintending Engineer (Estate Office) herein after called Superintending Engineer (Estate Office) who shall supervise and be in charge of the work and who shall sign the Contract on behalf of Director IITB as mentioned in Schedule 'F' hereunder.
 - g. The Superintending Engineer (Estate Office) or his successors means the professor in charge of infrastructure construction works of IITB, appointed by Director IITB and he shall also exercise the powers and duties of Engineer in Charge
 - h. The **Architect/ Architectural consultant** means the consulting agency appointed by Superintending Engineer (Estate Office) for comprehensive architectural design of the building.
 - i. **Program Management Consultancy (PMC)** means the Agency appointed by IITB to assist him in Pre and Post Award of the Contracts, project Management and day-today quality assurance/quality control and supervision of the construction works.
 - j. Accepting Authority shall mean the authority mentioned in Schedule 'F' for acceptance of the Tender.
 - k. **Excepted Risk** are risks due to riots (other than those on account of Contractor's employees), war (whether declared or not) invasion, act of foreign enemies,

4. Sufficiency of Tender

The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works and of the rates and prices quoted in the Schedule of Quantities, which rates and prices shall, except as otherwise provided, cover all his obligations under the Contract and all matters and things necessary for the proper completion and maintenance of the works

5. Discrepancies and Adjustment of Errors

The several documents forming the Contract are to be taken as mutually explanatory of one another, detailed drawings being followed in preference to small scale drawing and figured dimensions in preference to scale and special conditions in preference to General Conditions.

- i. There be any difference or discrepancy between the description of items as given in the schedule of quantities, particular specifications for individual items of work (including special conditions) and I.S. Codes etc., the following order of preference shall be observed.

- a. Description of items as given in the Schedule of Quantities / Bill of Quantities
- b. Particular specifications
- c. Special conditions
- d. Additional Conditions
- e. Drawings
- f. CPWD Technical Specifications including correction slips issued up to the last updated date of uploading/ till submission of the Tender.
- g. General Conditions of the Contract.
- h. Indian Standards Specifications of B.I.S.
- i. Decision of Superintending Engineer (Estate Office).

- ii. If there are varying or conflicting provisions made in any one document forming part of the Contract, the Accepting Authority shall be the deciding authority with regard to the intention of the document and his decision shall be final and binding on the Contractor.
- iii. Any error in description, quantity or rate in Schedule of Quantities or any omission therefrom shall not vitiate the Contract or release the Contractor from the execution of the whole or any part of the works comprised therein according to drawings and specifications or from any of his obligations under the Contract.

6. Signing of the Contract

The successful tenderer, on acceptance of his tender by the Accepting Authority, shall, within 15 days from the stipulated date of start of the work, sign the Contract consisting of:-

- i. the notice inviting tender, all the documents including drawings, if any, forming the tender as issued at the time of invitation of tender and acceptance thereof together with any correspondence leading thereto.
- ii. Standard Form as mentioned in Schedule 'F' consisting of:
 - a. Various standard clauses with corrections up to the date stipulated in Schedule 'F' along with annexures thereto.

- b. C.P.W.D. Safety Code/ Contract Safety Code.
- c. Model Rules for the protection of health, sanitary arrangements for workers employed by CPWD or its contractors.
- d. CPWD Contractor's Labour Regulations.
- e. List of Acts and omissions for which fines can be imposed.

Note: The above formats and documents, even though form part of the IITB Contract, they have been derived as standard formats from CPWD.

- iii. No payment for the work done will be made unless the Contract is signed by the Contractor.

6.2 CLAUSES OF THE CONTRACT:

Clause 1: Performance Guarantee:

- i. The Contractor shall submit an irrevocable Performance Guarantee of 5% (Five percent) of the Tended Amount in addition to other deposits mentioned elsewhere in the Contract for his proper performance of the Contract Agreement, (not withstanding and/or without prejudice to any other provisions in the Contract) within period specified in Schedule 'F' from the date of issue of letter of acceptance. This period can be further extended by the Engineer-in-Charge up to a maximum period as specified in schedule 'F' on written request of the Contractor stating the reason for delays in procuring the Performance Guarantee, to the satisfaction of the Engineer-in-Charge. This guarantee shall be in the form of **Insurance Surety Bonds, Account Payee Demand Draft, Fixed Deposit Receipt or Bank Guarantee from any of the Commercial Banks**. In case a fixed deposit receipt of any Bank is furnished by the Contractor to the IITB as part of the performance guarantee and the Bank is unable to make payment against the said fixed deposit receipt, the loss caused thereby shall fall on the Contractor and the Contractor shall forthwith on demand furnish additional security to the IITB to make good the deficit.
- ii. The Performance Guarantee shall be initially valid up to the stipulated date of completion plus minimum 60 days beyond that, if the same is submitted by the agency on scheduled format-I as per GCC. If the same is submitted on the format-II as per GCC, then the Performance Guarantee shall be valid up to the stipulated date of completion plus minimum 6 months beyond that. In case the time for completion of work gets enlarged, the Contractor shall get the validity of Performance Guarantee extended to cover such enlarged time for completion of work. After recording of the completion certificate for the work by the competent authority, the performance guarantee shall be returned to the Contractor, without any interest. However, in case of contracts involving maintenance of building and services/any other work after construction of same building and services/other work, then 50% of Performance Guarantee shall be retained as Security Deposit. The same shall be returned year wise proportionately.
- iii. The Engineer-in-Charge shall make a claim under the performance guarantee except for amounts to which the Director of Indian Institute of Technology, Bombay (IITB) is entitled under the Contract (not withstanding and/or without prejudice to any other provisions in the Contract agreement) in the event of:
 - a. Failure by the Contractor to extend the validity of the Performance Guarantee as described herein above, in which event the Engineer-in-Charge may claim the full amount of the Performance Guarantee.
 - b. Failure by the Contractor to pay Director of IIT B any amount due, either as agreed by the Contractor or determined under any of the Clauses/Conditions of the agreement, within 30 days of the service of notice to this effect by Engineer-in-Charge.

c. In the event of the Contract being determined or rescinded under provision of any of the Clause/Condition of the agreement, the performance guarantee shall stand forfeited in full and shall be absolutely at the disposal of the Director, IITB.

d. On substantial completion of any work which has been completed to such an extent that the intended purpose of the work is met and ready to use, then a provisional completion certificate shall be recorded by the Engineer-in-Charge. The provisional certificate shall have appended with a list of outstanding balance item of work that need to be completed in accordance with the provisions of the Contract.

This provisional completion certificate shall be recorded by the concerned Engineer-in-charge. After recording of the provisional completion certificate for the work by the competent authority, the 80 % of performance guarantee shall be returned to the Contractor, without any interest.

However, in case of contracts involving Maintenance of building and services /any other work after construction of same building and services/ other work, then 40% of performance guarantee shall be returned to the Contractor, without any interest after recording the provisional Completion certificate.

Clause 1 A: Recovery of Security Deposit

The person/persons whose tender(s) may be accepted (hereinafter called the Contractor) shall permit IITB at the time of making any payment to him for work done under the Contract to deduct a sum at the rate of 5 % of the gross amount of each running and final bill till the sum deducted will amount to 5% of the tendered value of the work. Such deductions will be made and held by IITB by way of Security Deposit unless he/they has/have deposited the amount of Security at the rate mentioned above in cash or in the form of Government Securities or fixed deposit receipts. In case a fixed deposit receipt of any Bank is furnished by the Contractor to the IITB as part of the security deposit and the Bank is unable to make payment against the said fixed deposit receipt, the loss caused thereby shall fall on the Contractor and the Contractor shall forthwith on demand furnish additional security to the IITB to make good the deficit.

All compensations or the other sums of money payable by the Contractor under the terms of this Contract may be deducted from, or paid by the sale of a sufficient part of his security deposit or from the interest arising there from, or from any sums which may be due to or may become due to the Contractor by IITB on any account whatsoever and in the event of his Security Deposit being reduced by reason of any such deductions or sale as aforesaid, the Contractor shall within 10 days make good in cash or fixed deposit receipt tendered by the State Bank of India or by Scheduled Banks or Government Securities (if deposited for more than 12 months) endorsed in favour of the Engineer-in-Charge, any sum or sums which may have been deducted from, or raised by sale of his security deposit or any part thereof. The security deposit shall be collected from the running bills and the final bill of the Contractor at the rates mentioned above.

The security deposit as deducted above can be released against bank guarantee issued by a scheduled bank, on its accumulations to a minimum of Rs. 5 lacs subject to the condition that amount of such bank guarantee, except last one, shall not be less than Rs. 5 lacs. Provided further that the validity of bank guarantee including the one given against the earnest money shall be in conformity with provisions contained in clause 17 which shall be extended from time to time depending upon extension of Contract granted under provisions of clause 2 and clause 5.

In case of contracts involving maintenance of building and services/any other work after construction of same building and services/other work, then 50% of Performance Guarantee shall be retained as Security Deposit. The same shall be returned year wise proportionately.

Note-1: Government papers tendered as security will be taken at 5% (five per cent) below its market price or at its face value, whichever is less. The market price of Government paper would

be ascertained by the Engineer-In-Charge at the time of collection of interest and the amount of interest to the extent of deficiency in value of the Government paper will be withheld if necessary.

Note-2: Government Securities will include all forms of Securities mentioned in Rule No. 274 of the G.F. Rules except fidelity bond. This will be subject to the observance of the condition mentioned under the rule against each form of security.

Note-3: Note 1 & 2 above shall be applicable for both clause 1 and 1A

Clause 2: Compensation for Delay

If the Contractor fails to maintain the required progress in terms of clause 5 or to complete the work and clear the site on or before the Contract or justified extended date of completion as per clause 5 (excluding any extension under Clause 5.5) as well as any extension granted under clauses 12 and 15, he shall, without prejudice to any other right or remedy available under the law to the IITB on account of such breach, pay as compensation the amount calculated at the rates stipulated below as the authority specified in schedule 'F' may decide on the amount of accepted tendered Value of the work for every completed day/month (as determined) that the progress remains below that specified in Clause 5 or that the work remains incomplete.

- a. Compensation for delay of work: with maximum rate @ 1% (one percent) per month of delay to be computed on per day basis based on quantum of damage suffered due to stated delay on the part of Contractor.

Provided always that the total amount of compensation for delay to be paid under this condition shall not exceed 10 % (ten percent) of the accepted Tendered Value of work or of the accepted Tendered Value of the Sectional part of work as mentioned in Schedule 'F' for which a separate period of completion is originally given.

In case no compensation has been decided by the authority in Schedule 'F' during the progress of work, this shall be no waiver of right to levy compensation by the said authority if the work remains incomplete on final justified extended date of completion. If the Engineer in Charge decides to give further extension of time allowing performance of work beyond the justified extended date, the Contractor shall be liable to pay compensation for such extended period. If any variation in amount of Contract takes place during such extended period beyond justified extended date and the Contractor becomes entitled to additional time under clause 12, the net period for such variation shall be accounted for while deciding the period for levy of compensation. However, during such further extended period beyond the justified extended period, if any delay occurs by events under sub clause 5.2, the Contractor shall be liable to pay compensation for such delay.

Provided that compensation during the progress of work before the justified extended date of completion for delay under this clause shall be for non-achievement of sectional completion or part handing over of work on stipulated/justified extended date for such part work or if delay affects any other works/services. This is without prejudice to right of action by the Engineer-in-Charge under clause 3 for delay in performance and claim of compensation under that clause.

In case action under clause 2 has not been finalized and the work has been determined under clause 3, the right of action under this clause shall remain post determination of Contract but levy of compensation shall be for days the progress is behind the schedule on date of determination, as assessed by the authority in Schedule F, after due consideration of justified extension. The compensation for delay, if not decided before the determination of Contract, shall be decided after of determination of Contract.

The amount of compensation may be adjusted or set-off against any sum payable to the Contractor under this or any other Contract with the IITB. In case, the Contractor does not achieve a particular milestone mentioned in Schedule F (Clause 5), or the re-scheduled milestone(s) in terms of Clause 5.4, the amount shown against that milestone shall be withheld, to be adjusted against the compensation levied as above. With-holding of this amount on failure to achieve a milestone, shall be automatic without any notice to the Contractor. However, if the

Contractor catches up with the progress of work on the subsequent milestone(s), the withheld amount shall be released. In case the Contractor fails to make up for the delay in subsequent milestone(s), amount mentioned against each milestone missed subsequently also shall be withheld. However, no interest, whatsoever, shall be payable on such withheld amount.

Clause 3: When Contract can be Determined:

Subject to other provisions contained in this clause, the Engineer-in-Charge may, without prejudice to any other rights or remedy against the Contractor in respect of any delay, not following safety norms, inferior workmanship, any claims for damages and/or any other provisions of this Contract or otherwise, and whether the date of completion has or has not elapsed, by notice in writing absolutely determine the Contract in any of the following cases:

- i. If the Contractor having been given by the Engineer-in-Charge a notice in writing to rectify, reconstruct or replace any defective work or that the work is being performed in an inefficient or otherwise improper or un-workman like manner shall omit to comply with the requirement of such notice for a period of seven days thereafter.
- ii. If the Contractor has, without reasonable cause, suspended the progress of the work or has failed to proceed with the work with due diligence and continues to do so after a notice in writing of seven days from the Engineer-in-Charge.
- iii. If the Contractor fails to complete the work or section of work with individual date of completion on or before the stipulated or justified extended date, on or before such date of completion; and the Engineer-in-Charge without any prejudice to any other right or remedy under any other provision in the Contract has given further reasonable time in a notice given in writing in that behalf as either mutually agreed or in absence of such mutual agreement by his own assessment making such time essence of Contract and in the opinion of Engineer-in-Charge the Contractor will be unable to complete the same or does not complete the same within the period specified.
- iv. If the Contractor persistently neglects to carry out his obligations under the Contract and/ or commits default in complying with any of the terms and conditions of the Contract and does not remedy it or take effective steps to remedy it within 7 days after a notice in writing is given to him in that behalf by the Engineer-in-Charge.
- v. If the Contractor shall offer or give or agree to give to any person in IITB service or to any other person on his behalf any 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 act in relation to the obtaining or execution of this or any other Contract for IITB.
- vi. If the Contractor shall enter into a Contract with IITB in connection with which commission has been paid or agreed to be paid by him or to his knowledge, unless the particulars of any such commission and the terms of payment thereof have been previously disclosed in writing to the Engineer-in-Charge.
- vii. If the Contractor had secured the Contract with IITB as a result of wrong tendering or other non-Bonafede methods of competitive tendering or commits breach of Integrity Agreement.
- viii. If the Contractor being an individual, or if a firm, any partner thereof shall at any time be adjudged insolvent or have a receiving order or order for administration of his estate made against him or shall take any proceedings for liquidation or composition (other than a voluntary liquidation for the purpose of amalgamation or reconstruction) under any Insolvency Act for the time being in force or make any conveyance or assignment of his effects or composition or arrangement for the benefit of his creditors or purport so to do, or if any application be made under any Insolvency Act for the time being in force for the sequestration of his estate or if a trust deed be executed by him for benefit of his creditors.

- ix. If the Contractor being a company shall pass a resolution or the court shall make an order that the company shall be wound up or if a receiver or a manager on behalf of a creditor shall be appointed or if circumstances shall arise which entitle the court or the creditor to appoint a receiver or a manager or which entitle the court to make a winding up order.
- x. If the Contractor shall suffer an execution being levied on his goods and allow it to be continued for a period of 21 days.
- xi. If the Contractor assigns (excluding part(s) of work assigned to other agency(s) by the Contractor as per terms of Contract), transfers, sublets (engagement of labour on a piecework basis or of labour with materials not to be incorporated in the work, shall not be deemed to be subletting) or otherwise parts with or attempts to assign, transfer, sublet or otherwise parts with the entire works or any portion thereof without the prior written approval of the Engineer -in-Charge. When the Contractor has made himself liable for action under any of the cases aforesaid, the Engineer-in-Charge on behalf of Superintending Engineer (Estate Office) shall have powers:
 - a. To determine the Contract as aforesaid so far as performance of work by the Contractor is concerned (of which determination notice in writing to the Contractor under the hand of the Engineer-in-Charge shall be conclusive evidence). Upon such determination, Security Deposit already recovered, Security deposit payable and Performance Guarantee under the Contract shall be liable to be forfeited and shall be absolutely at the disposal of the IITB.
 - b. After giving notice to the Contractor to measure up the work of the Contractor and to take such whole, or the balance or part thereof, as shall be un-executed out of his hands and to give it to another Contractor to complete the work. The Contractor, whose Contract is determined as above, shall not be allowed to participate in the tendering process for the balance work including any new items needed to complete the work. In the event of above courses being adopted by the Engineer-in-Charge, the Contractor shall have no claim to compensation for any loss sustained by him by reasons of his having purchased or procured any materials or entered into any engagements or made any advances on account or with a view to the execution of the work or the performance of the Contract. And in case action is taken under any of the provision aforesaid, the Contractor shall not be entitled to recover or be paid any sum for any work thereof or actually performed under this Contract unless and until the Engineer-in-Charge has certified in writing the performance of such work and the value payable in respect thereof and he shall only be entitled to be paid the value so certified.

Clause 3 A

In case, the work cannot be started due to reasons not within the control of the Contractor within 1/8 th of the stipulated time for completion of work or one month whichever is higher, either party may close the Contract by giving notice to the other party stating the reasons. In such eventuality, the Performance Guarantee of the Contractor shall be refunded within following time limits:

If the Tendered value of work is up to Rs. 1 Crore: 15 days.

If the Tendered value of work is more than Rs. 1 Crore and up to Rs.10 Crore: 21 days

If the Tendered value of work exceeds Rs. 10 Crore: 30 days

Neither party shall claim any compensation for such eventuality. This clause is not applicable for any breach of the Contract by either party.

Clause 4:

Contractor liable to pay compensation even if action not taken under Clause 3

In any case in which any of the powers conferred upon the Engineer-in-Charge by Clause 3 thereof, shall have become exercisable and the same are not exercised, the non-exercise thereof shall not constitute a waiver of any of the conditions hereof and such powers shall notwithstanding be exercisable in the event of any future case of default by the Contractor and the liability of the Contractor for compensation shall remain unaffected. In the event of the Engineer-in-Charge putting in force all or any of the powers vested in him under the preceding clause he may, if he so desires after giving a notice in writing to the Contractor, take possession of (or at the sole discretion of the Engineer-in-Charge which shall be final and binding on the Contractor) use as on hire (the amount of the hire money being also in the final determination of the Engineer-in-Charge) all or any tools, plant, materials and stores, in or upon the works, or the site thereof belonging to the Contractor, or procured by the Contractor and intended to be used for the execution of the work/or any part thereof, paying or allowing for the same in account at the Contract rates, or, in the case of these not being applicable, at current market rates to be certified by the Engineer-in-Charge, whose certificate thereof shall be final, and binding on the Contractor, clerk of the works, foreman or other authorized agent to remove such tools, plant, materials, or stores from the premises (within a time to be specified in such notice) in the event of the Contractor failing to comply with any such requisition, the Engineer-in-Charge may remove them at the Contractor's expense or sell them by auction or private sale on account of the Contractor and his risk in all respects and the certificate of the Engineer-in-Charge as to the expenses of any such removal and the amount of the proceeds and expenses of any such sale shall be final and conclusive against the Contractor.

Clause 5: Time and Extension for Delay

The time allowed for execution of the Works as specified in the Schedule 'F' or the extended time in accordance with these conditions shall be the essence of the Contract. The execution of the work shall commence from such time period as mentioned in schedule 'F' or from the date of handing over of the site, notified by the Engineer-in-Charge, whichever is later. If the Contractor commits default in commencing the execution of the work as aforesaid, the performance guarantee shall be forfeited by the Engineer in Charge and shall be absolutely at the disposal of the IITB without prejudice to any other right or remedy available in law.

5.1 As soon as possible but within 7 (seven) working days of award of work and in consideration of:

- a. Schedule of handing over of site as specified in the Schedule 'F'.
 - b. Schedule of issue of designs as specified in the Schedule 'F'.
- (i) The Contractor shall submit a Time and Progress Chart for each milestone. The Engineer-in-Charge may within 7 (seven) working days thereafter, if required modify, and communicate the program approved to the Contractor failing which the program submitted by the Contractor shall be deemed to be approved by the Engineer-in-Charge. The work programme shall include all details of balance drawings and decisions required to complete the Contract with specific dates by which these details are required by Contractor without causing any delay in execution of the work. The Chart shall be prepared in direct relation to the time stated in the Contract documents for completion of items of the works. It shall indicate the forecast of the dates of commencement and completion of various trades of sections of the work and may be amended as necessary by agreement between the Engineer- in-Charge and the Contractor within the limitations of time imposed in the Contract documents.
- (ii) In case of non-submission of construction programme by the Contractor, the program approved by the Engineer-in-Charge shall be deemed to be final.

- (iii) The approval by the Engineer-in-Charge of such programme shall not relieve the Contractor of any of the obligations under the Contract.
- (iv) The Contractor shall submit the Time and Progress Chart and progress report using the mutually agreed software or in other format decided by Engineer-in-Charge for the work done during previous month to the Engineer-in-charge on or before 5th day of each month failing which a recovery as per Schedule F (Clause 5) to be decided by the NIT approving authority shall be made on per week or part basis in case of delay in submission of the monthly progress report.

5.2 If the work(s) be delayed by: - (i)

force majeure, or

- (ii) abnormally bad weather, or
- (iii) serious loss or damage by fire, or
- (iv) civil commotion, local commotion of workmen, strike or lockout, affecting any of the trades employed on the work, or
- (v) delay on the part of other contractors or tradesmen engaged by Engineer-in-Charge in executing work not forming part of the Contract, or
- (vi) Any other cause like above which, in the reasoned opinion of the Engineer-in-Charge is beyond the Contractor's control.

then upon the happening of any such event causing delay, the Contractor shall immediately give notice thereof in writing to the Engineer-in-Charge but shall nevertheless use constantly his best endeavours to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of the Engineer-in-Charge to proceed with the works.

The Contractor shall have no claim of damages for extension of time granted or rescheduling of milestone/s for events listed in sub clause 5.2.

5.3 In case the work is hindered by the Institute or for any reason / event, for which the Institute is responsible, the authority as indicated in Schedule 'F' shall, if justified, give a fair and reasonable extension of time and reschedule the mile stones for completion of work, such extension of time or rescheduling of milestone/s shall be without prejudice to any other right or remedy of the parties in Contract or in law; provided further that for concurrent delays under this sub clause and sub clause 5.2 to the extent the delay is covered under sub clause 5.2 the Contractor shall be entitled to only extension of time and no damages.

5.4 Request for rescheduling of Mile stones or extension of time, to be eligible for consideration, shall be made by the Contractor in writing within fourteen days of the happening of the event causing delay on the prescribed forms i.e., Form of application by the Contractor for seeking rescheduling of milestones or Form of application by the Contractor for seeking extension of time (Appendix -XVI) respectively to the authority as indicated in Schedule 'F'. The Contractor shall indicate in such a request the period by which rescheduling of milestone/s or extension of time is desired. With every request for rescheduling of milestones, or if at any time the actual progress of work falls behind the approved programme by more than 10% of the stipulated period of completion of the Contract, the Contractor shall produce a revised programme which shall include all details of pending drawings and decisions required to complete the Contract and also the target dates by which these details should be available without causing any delay in execution of the work. A recovery as specified in Schedule 'F' shall be made on per day basis in case of delay in submission of the revised programme.

5.4.1 In any such case the authority as indicated in Schedule 'F' may give a fair and reasonable extension of time for completion of work or reschedule the mile stones. Engineer -in-

Charge shall finalize/ reschedule a particular mile stone before taking an action against subsequent mile stone. Such extension or rescheduling of the milestones shall be communicated to the Contractor by the authority as indicated in Schedule 'F' in writing, within 21 days of the date of receipt of such request from the Contractor in prescribed form. In event of non-application by the Contractor for extension of time E-inC after affording opportunity to the Contractor, may give, supported with a programme (as specified under 5.4 above), a fair and reasonable extension within a reasonable period of occurrence of the event.

5.5 In case the work is delayed by any reasons, in the opinion of the Engineer-in-Charge, by the Contractor for reasons beyond the events mentioned in clause 5.2 or clause 5.3 or clause 5.4 and beyond the justified extended date; without prejudice to right to take action under Clause 3, the Engineer-in-Charge may grant extension of time required for completion of work without rescheduling of milestones. The Contractor shall be liable for levy of compensation for delay for such extension of time.

Clause 6: Computerized Measurement Book

6.1 Engineer-in-Charge shall, except as otherwise provided, ascertain and determine by measurement the value of work done in accordance with the Contract.

6.2 All measurements of all items having financial value shall be entered by the Contractor and compiled in the shape of the Computerized Measurement Book having pages of A-4 size as per the format of the IITB so that a complete record is obtained of all the items of works performed under the Contract.

6.3 All such measurements and levels recorded by the Contractor or his authorized representative from time to time, during the progress of the work, shall be got checked by the Contractor from the Engineer-in-Charge or his authorized representative as per interval or program fixed in consultation with Engineer-in-Charge or his authorized representative. After the necessary corrections made by the Engineer-in-Charge, the measurement sheets shall be returned to the Contractor for incorporating the corrections and for resubmission to the Engineer-in-Charge for the dated signatures by the Engineer-in-Charge and the Contractor or their representatives in token of their acceptance.

6.4 Whenever bill is due for payment, the Contractor would initially submit draft computerized measurement sheets and these measurements would be got checked/test checked from the Engineer-in-Charge and/or his authorized representative. The Contractor will, thereafter, incorporate such changes as may be done during these checks/test checks in his draft computerized measurements, and submit to the department a computerized measurement book, duly bound, and with its pages machine numbered. The Engineer-in-Charge and/or his authorized representative would thereafter check this MB, and record the necessary certificates for their checks/test checks.

6.5 The final, fair, computerized measurement book given by the Contractor, duly bound, with its pages machine numbered, should be 100% correct, and no cutting or overwriting in the measurements would thereafter be allowed. If at all any error is noticed, the Contractor shall have to submit a fresh computerized MB with its pages duly machine numbered and bound, after getting the earlier MB cancelled by the Institute. Thereafter, the MB shall be taken in the Superintending Engineer (Estate Office) Office records, and allotted a number as per the Register of Computerized MBs. This should be done before the corresponding bill is submitted to the Superintending Engineer (Estate Office) Office for payment. The Contractor shall submit two spare copies of such computerized 'B's for the purpose of reference and record by the various officers of the department.

- 6.6 The Contractor shall also submit to the department separately his computerized Abstract of Cost and the bill based on these measurements, duly bound, and its pages machine numbered along with two spare copies of the bill. Thereafter, this bill will be processed by the Superintending Engineer (Estate Office) Office and allotted a number as per the computerized record in the same way as done for the measurement book meant for measurements.
- 6.7 The Contractor shall, without extra charge, provide all assistance with every appliance, labour and other things necessary for checking of measurements/levels by the Engineer-in- Charge or his representative.
- 6.8 Except where any general or detailed description of the work expressly shows to the contrary, measurements shall be taken in accordance with the procedure set forth in the specifications notwithstanding any provision in the relevant Standard Method of measurement or any general or local custom. In the case of items which are not covered by specifications, measurements shall be taken in accordance with the relevant standard method of measurement issued by the Bureau of Indian Standards and if for any item no such standard is available then a mutually agreed method shall be followed.
- 6.9 The Contractor shall give not less than seven days' notice to the Engineer-in-Charge or his authorized representative in charge of the work before covering up or otherwise placing beyond the reach of checking and/or test checking the measurement of any work in order that the same may be checked and/or test checked and correct dimensions thereof be taken before the same is covered up or placed beyond the reach of checking and/or test checking measurement and shall not cover up and place beyond reach of measurement any work without consent in writing of the Engineer-in-Charge or his authorized representative in charge of the work who shall within the aforesaid period of seven days inspect the work, and if any work shall be covered up or placed beyond the reach of checking and/or test checking measurements without such notice having been given or the Engineer-in-Charge's consent being obtained in writing the same shall be uncovered at the Contractor's expense, or in default thereof no payment or allowance shall be made for such work or the materials with which the same was executed.
- 6.10 Engineer-in-Charge or his authorized representative may cause either themselves or through another officer of the department to check the measurements recorded by Contractor and all provisions stipulated herein above shall be applicable to such checking of measurements or levels.
- 6.11 It is also a term of this Contract that checking and/or test checking the measurements of any item of work in the measurement book and/or its payment in the interim, on account of final bill shall not be considered as conclusive evidence as to the sufficiency of any work or material to which it relates nor shall it relieve the Contractor from liabilities from any over measurement or defects noticed till completion of the defect's liability period.

Clause 7: Payment on intermediate certificate to be regarded as Advances

- 7.1 No payment shall be made for work, estimated to cost Rs. Twenty lakhs or less till after the whole of the work shall have been completed and certificate of completion given. For works estimated to cost over Rs, twenty lakhs the interim or running account bills shall be submitted by the Contractor for the work executed on the basis of such recorded measurements on the format of the Department in triplicate on or before the date of every month fixed for the same by the Engineer-in-Charge. The Contractor shall not be entitled to be paid any such interim payment if the gross work done together with net payment/ adjustment of advances for material collected, if any, since the last such payment is less than the amount specified in Schedule 'F', in which case the interim bill shall be prepared on the appointed date of the month after the requisite progress is

achieved. Engineer-in Charge shall arrange to have the bill verified by taking or causing to be taken, where necessary, the requisite measurements of the work. In the event of the failure of the Contractor to submit the bills, no claims whatsoever due to delays on payment including that of interest shall be payable to the Contractor. Payment on account of amount admissible shall be made by the Engineer-in-Charge certifying the sum to which the Contractor is considered entitled by way of interim payment at such rates as decided by the Engineer-in-Charge. An amount of ad-hoc payment not less than 75% of the net amount of the bill under check, shall be made within 10 working days of submission of the bill by the Contractor to the Engineer-in-Charge together with the account of the material issued by IITB, or dismantled materials, if any. The remaining payment is also to be made after final checking of the bill within 28 working days of submission of bill by the Contractor.

7.2 All such interim payments shall be regarded as payment by way of advances against final payment only and shall not preclude the requiring of bad, unsound and imperfect or unskilled work to be rejected, removed, taken away and reconstructed or re-erected. Any certificate given by the Engineer-in-Charge relating to the work done or materials delivered forming part of such payment, may be modified or corrected by any subsequent such certificate(s) or by the final certificate and shall not by itself be conclusive evidence that any work or materials to which it relates is/are in accordance with the Contract and specifications. Any such interim payment, or any part thereof shall not in any respect

conclude, determine or affect in any way powers of the Engineer-in-Charge under the Contract or any of such payments be treated as final settlement and adjustment of accounts or in any way vary or affect the Contract.

7.3 Pending consideration of extension of date of completion, interim payments shall continue to be made as herein provided without prejudice to the right of the department to take action under the terms of this Contract for delay in the completion of work, if the extension of date of completion is not granted by the competent authority.

Payments in composite Contracts

In case of composite tenders, running payment for the major and minor components shall be made by Superintending Engineer (Estate Office) to the Contractor.

In case main Contractor fails to make the payment to contractor associated by him within 15 days of receipt of each running account payment, then on the written complaint of contractor associated for such minor component, Superintending Engineer (Estate Office) shall serve the show cause to the Contractor and if reply of the Contractor either not received or found unsatisfactory, he may make the payment directly to contractor associated for minor component as per the terms and conditions of the agreement drawn between the Contractor and associate contractor fixed by him. Such payment made to the associate contractor shall be recovered by Engineer-in-charge from the next Running Account Bill / final bill due to the Contractor as the case may be.

Clause 7A:

No Running Account Bill shall be paid for the work till the applicable labour licenses, registration with EPFO, ESIC and BOCW Welfare Board, whatever applicable are submitted by the Contractor to the Engineer-in-Charge.

Clause 7B: Payment to third party

If the exigencies of the work so demand, the Engineer-in-Charge may allow payment to a third party, who is creditor to the contractor, after fulfilling the following conditions: -

- (a) The Contractor gives an authority letter addressed to the Engineer-in-Charge on a nonjudicial stamp paper of Rs.100 in the format given below:

I / We authorize the Superintending Engineer (Estate Office) to pay directly on my / our behalf to (name of the third party) an amount of Rs.....(Rupees in words) for the work done or

supplies made by (name of the third party). I / We shall be responsible for the quality and quantity of the same under the provisions of agreement number

Signature of the Contractor

- (b) The total payment to third party (or parties) shall not exceed 10% of the agreement cost of the work.

Clause 8: Completion Certificate and Completion Plans:

Within ten days of the completion of the work, the Contractor shall give notice of such completion to the Engineer-in-Charge and within thirty days of the receipt of such notice, the Engineer-in-Charge shall inspect the work and if there is no defect in the work, shall furnish the Contractor with a final certificate of completion, otherwise a provisional certificate of physical completion indicating defects (a) to be rectified by the Contractor and/or (b) for which payment will be made at reduced rates, shall be issued. But no final certificate of completion shall be issued, nor shall the work be considered to be complete until the Contractor shall have removed from the premises on which the work shall be executed all scaffolding, surplus materials, rubbish and all huts and sanitary arrangements required for his/their work people on the site in connection with the execution of the works as shall have been erected or constructed by the Contractor(s) and cleaned off the dirt from all wood work, doors, windows, walls, floor or other parts of the building, in, upon, or about which the work is to be executed or of which he may have had possession for the purpose of the execution; thereof, and not until the work shall have been measured by the Engineer-in-Charge. If the Contractor shall fail to comply with the requirements of this Clause as to removal of scaffolding, surplus materials and rubbish and all huts and sanitary arrangements as aforesaid and cleaning off dirt on or before the date fixed for the completion of work, the Engineer-in-Charge may at the expense of the Contractor remove such scaffolding, surplus materials and rubbish etc., and dispose of the same as he thinks fit and clean off such dirt as aforesaid, and the Contractor shall have no claim in respect of scaffolding or surplus materials as aforesaid except for any sum actually realized by the sale thereof.

Clause 8 A: Completion Plans to be Submitted by the Contractor:

The Contractor shall submit completion plans for Internal and External Civil, Electrical and Mechanical Services within thirty days of the completion of the work, provided that the service plans having been issued for execution by the Engineer-in-Charge, unless the Contractor, by virtue of any other provision in the Contract, is required to prepare such plans

In case, the Contractor fails to submit the completion plan as aforesaid, he shall be liable to pay a sum of 0.1 % (zero-point one percent) of accepted Tendered Value or limit prescribed in Schedule F whichever is more as may be fixed by the authority as mentioned in Schedule F and in this respect the decision of the that authority shall be final and binding on the Contractor.

Clause 9: Payment of Final Bill

The final bill shall be submitted by the contractor in the same manner as specified in interim bills within three months of physical completion of the work or within one month of the date of the final certificate of completion furnished by the Engineer-in-Charge whichever is earlier. No further claims shall be made by the contractor after submission of the final bill and these shall be deemed to have been waived and extinguished. Payment of those items of the bill in respect of which there is no dispute, and for those items which are in dispute on account of quantity and/or rates shall be paid at approved quantity and/or rates by the Engineer-in- Charge, within three months period reckoned from the date of receipt of the bill by the Engineer in- Charge or

his authorized Assistant Engineer, complete with account of materials issued by the Department and dismantled materials.

Clause 9A: Payment of Contractor's Bills to Banks

Payments due to the Contractor may, if so desired by him, be made to his bank, registered financial, co-operative or thrift societies or recognized financial institutions instead of direct to him provided that the Contractor furnishes to the Engineer-in-Charge (1) an authorization in the form of a legally valid document such as a power of attorney conferring authority on the bank; registered financial, co-operative or thrift societies or recognized financial institutions to receive payments and (2) his own acceptance of the correctness of the amount made out as being due to him by IITB or his signature on the bill or other claim preferred against IITB before settlement by the Engineer-in-Charge of the account or claim by payment to the bank, registered financial, cooperative or thrift societies or recognized financial institutions. While the receipt given by such banks; registered financial, co-operative or thrift societies or recognized financial institutions shall constitute a full and sufficient discharge for the payment, the Contractor shall whenever possible present his bills duly receipted and discharged through his bank, registered financial, co-operative or thrift societies or recognized financial institutions.

Nothing herein contained shall operate to create in favour of the bank; registered financial, cooperative or thrift societies or recognized financial institutions any rights or equities vis-a- vis the Director, IITB.

Clause 10A: Materials to be provided by the Contractor.

The Contractor shall, at his own expense, provide all materials, required for the works other than those which are stipulated to be supplied by the IITB as per [Appendix F](#).

The Contractor shall, at his own expense and without delay; supply to the Engineer-in- Charge samples of materials to be used on the work and shall get these approved in advance. All such materials to be provided by the Contractor shall be in conformity with the specifications laid down or referred to in the Contract. The Contractor shall, if requested by the Engineer-in-Charge furnish proof, to the satisfaction of the Engineer-in-Charge that the materials so comply. The Engineer-in-Charge shall within thirty days of supply of samples or within such further period as he may require intimate to the Contractor in writing whether samples are approved by him or not. If samples are not approved, the Contractor shall forthwith arrange to supply to the Engineer-inCharge for his approval, fresh samples complying with the specifications laid down in the Contract. When materials are required to be tested in accordance with specifications, approval of the Engineer-in-Charge shall be issued after the test results are received.

The Contractor shall at his risk and cost submit the samples of materials to be tested or analysed and shall not make use of or incorporate in the work any materials represented by the samples until the required tests or analysis have been made and materials finally accepted by the Engineer-in-Charge. The Contractor shall not be eligible for any claim or compensation either arising out of any delay in the work or due to any corrective measures required to be taken on account of and as a result of testing of materials.

The Contractor shall, at his risk and cost, make all arrangements and shall provide all facilities as the Engineer-in-Charge may require for collecting, and preparing the required number of samples for such tests at such time and to such place or places as may be directed by the Engineer-in-Charge including testing charges. The Engineer -in- Charge or his authorized representative shall at all times have access to the works and to all workshops and places where work component is being prepared or from where materials, manufactured articles or machinery are being obtained for the works and the Contractor shall afford every facility and every assistance in obtaining the right to such access.

The Engineer-in-Charge shall have full powers to require the removal from the premises of all materials which in his opinion are not in accordance with the specifications and in case of

default, the Engineer-in-Charge shall be at liberty to employ at the expense of the Contractor, other persons to remove the same without being answerable or accountable for any loss or damage that may happen or arise to such materials. The Engineer-in-Charge shall also have full powers to require other proper materials to be substituted thereof and in case of default, the Engineer-in-Charge may cause the same to be supplied and all costs which may attend such removal and substitution shall be borne by the Contractor.

The Contractor shall at his own expense, provide a material testing lab at the site for conducting routine field tests. The lab shall be equipped at least with the testing equipment as specified in schedule F.

Clause 10 B: Secured Advance on Materials

- (i) The Contractor, on signing an indenture in the form to be specified in appendix XV,, shall be entitled to be paid during the progress of the execution of the work up to 75% of the assessed value of any materials or an amount not exceeding 75% of the material element cost in the tendered rate of the finished item of the work, whichever is lower, which are in the opinion of the Engineer-in-Charge non-perishable, non-fragile and non-combustible and are in accordance with the Contract and which have been brought on the site in connection therewith and are adequately stored and/or protected against damage by weather or other causes but which have not at the time of advance been incorporated in the works. When materials on account of which an advance has been made under this sub-clause are incorporated in the work, the amount of such advance shall be recovered/deducted from the next payment made under any of the clause or clauses of this Contract.

Such secured advance shall also be payable on other items of perishable nature, fragile and combustible with the approval of the Engineer-in-Charge provided the Contractor provides a comprehensive insurance cover for the full cost of such materials. The decision of the Engineer-in-Charge shall be final and binding on the Contractor in this matter. No secured advance, shall however, be paid on high-risk materials such as ordinary glass, sand, petrol, diesel etc.

Mobilization advance

- (ii) Mobilization advances not exceeding 10% of the tendered value may be given, if requested by the Contractor in writing within six months of the order to commence the work. Such advance shall be released in two or more instalments to be determined by the Engineer-in-Charge at his sole discretion. The first instalment of such advance shall be released by the Engineer-in-charge to the Contractor on a request made by the Contractor to the Engineer-in-Charge in this behalf. The second and subsequent instalments shall be released by the Engineer-in-Charge only after the Contractor furnishes a proof of the satisfactory utilization of the earlier instalment to the entire satisfaction of the Engineer-in-Charge.

Before any instalment of advance is released, the Contractor shall execute a Bank Guarantee Bonds not more than 6 in number from commercial Bank for the amount equal to 110% of the amount of advance and valid for the period till recovery of advance. This (Bank Guarantee from commercial Bank on prescribed format for the amount equal to 110% of the balance amount of advance) shall be kept renewed from time to time to cover the balance amount and likely period of complete recovery.

Interest & Recovery

- (iii) The mobilization advances in (ii) above bear simple interest at the rate of **8 percent** per annum and shall be calculated from the date of payment to the date of recovery, both days inclusive, on the outstanding amount of advance. Recovery of such sums advanced shall be made by the deduction from the Contractor's bills commencing after first ten percent of the gross value of the work is executed and paid, on pro-rata percentage basis to the gross value of the work billed beyond 10% in such a way that the entire advance is

recovered by the time eighty percent of the gross value of the Contract is executed and paid, together with interest due on the entire outstanding amount up to the date of recovery of the instalment.

- (iv) If the circumstances are considered reasonable by the Engineer-in-Charge, the period mentioned in (ii) and (iii) for request by the Contractor in writing for grant of mobilization advance may be extended at the discretion of the Engineer-in-Charge

Clause 10 C Payment on Account of Increase in Prices / Wages due to Statutory Order(s)

If after submission of tender, if the price of any material incorporated in the work and / or wages of labour increases as a direct result of the coming into force of any fresh law or statutory rule or order (but not due to any variation of rate in GST applicable on such material (s) being considered under this clause) beyond the prices / wages prevailing at the time of the last stipulated date of receipt of tenders including extensions, if any, for the work during Contract period including the justified period extended under the provisions of clause 5 of the Contract without any action under clause 2, then the amount of the Contract shall accordingly be varied.

If after submission of the tender, the price of any material incorporated in the works and / or wages of labour as prevailing at the time of last stipulated date of receipt of tender including extensions, if any, is decreased as a direct result of the coming into force of any fresh law or statutory rules or order (but not due to any variation of rate in GST applicable on such material (s) being considered under this clause), IITB shall in respect of materials incorporated in the works and/or labour engaged on the execution of the work after the date of coming into force of such law, statutory rule or order be entitled to deduct from the dues of the Contractor, such amount as shall be equivalent to the difference between the prices of the materials and/or wages as prevailed at the time of the last stipulated date for receipt of tenders including extensions if any for the work and the prices of materials and/or wages of labour on the coming into force of such law, statutory rule or order. This will be applicable for the Contract period including the justified period extended under the provisions of clause 5 of the Contract without any action under clause 2.

Engineer-in-Charge shall call books of account and other relevant documents from the Contractor to satisfy himself about reasonability of increase in prices of materials and wages.

The Contractor shall, within a reasonable time of his becoming aware of any alteration in the price of any such materials and/or wages of labour, give notice thereof to the Engineer-in-Charge stating that the same is given pursuant to this condition together with all information relating thereto which he may be in position to supply.

For this purpose, the labour component of 85% of the value of the work executed during period under consideration shall not exceed the percentage as specified in Schedule F, and the increase / decrease in labour shall be considered on the minimum daily wages in rupees of any unskilled Mazdoor, fixed under any law statutory rule and order. The cost of work for which escalation is applicable (W) is same as cost of work done worked out as indicated in sub-para (ii) of clause 10 CC except the amount of full assessed value of secured Advance.

Provided always that:

- (a) Where provisions of clause 10CC are applicable, provisions of clause 10C will not be applicable.
- (b) Where provisions of clause 10CC are not applicable, provisions of clause 10C will become applicable.

Clause 10CC Price adjustment for Works- Deleted

If the prices of materials and / or wages of labour required for execution of the work increase, the Contractor shall be compensated for such increase as per provisions detailed below and the amount of the Contract shall accordingly be varied, subject to the condition that such compensation for escalation in prices and wages shall be available only for the work done

during the stipulated period of the Contract including the justified period extended under the provisions of clause 5 of the Contract without any action under clause 2. Such compensation for escalation in the prices of materials and labour, when due, shall be worked out based on the following provisions: -

- (i) The base date for working out such escalation shall be the last stipulated date of receipt of tenders including extension, if any.
- (ii) The cost of work on which escalation will be payable shall be reckoned as below:
 - (a) Gross value of work done up to this quarter: (A)
 - (b) Gross value of work done up to the last quarter: (B)
 - (c) Gross value of work done since previous quarter (C) = (A-B):
 - (d) Full assessed value of Secured Advance fresh paid in this quarter: (D)
 - (e) Full assessed value of Secured Advance recovered in this quarter: (E) (f) Full assessed value of Secured Advance for which escalation Payable in this quarter (F) = (D-E)
 - (g) Advance payment made during this quarter: (G)
 - (h) Advance payment recovered during this quarter: (H)
 - (i) Advance payment for which escalation is payable in this Quarter (j) = (G-H)
 - (J) Amount paid based on prevailing market rates due to deviations / variations as per Clause 12 during this quarter: (J)

Then, $M = C + F + I - J$

Cost of work for which escalation is applicable: $W = 0.85 M$

Components for material, labour, etc., shall be pre-determined for every work and incorporated in the Conditions of the Contract attached to the tender documents included in Schedule F. The decision of the Engineer-in-Charge in working out such percentage shall be binding on the Contractors.

- (iii) The following principles shall be followed while working out the payment / recovery on account of variation of prices of materials and /or wages of labour.
 - a) The compensation for escalation shall be worked out at quarterly intervals, and shall be with respect to the cost of work done as per bills paid during three calendar months of the said quarter. The date of submission of bill by the contractor to the IITB shall be guiding factor to decide the bills relevant to the quarterly interval. The first such payment shall be made at the end of three months after the month (excluding the month in which the letter of commencement for the work is issued by the Engineer-in-Charge) and thereafter at three months interval. At the time completion of the work, the last period for payment might become less than 3 months, depending on the actual date of completion.
 - b) The indices as defined below (excluding LI) relevant to any quarter / period for which compensation is to be paid shall be the arithmetical average of the indices relevant to the three calendar months. If the period up to the date of completion after the quarter covered by the last such instalment of payment, is less than three months, the indices shall be the average of the indices for the months falling within that period.
 - c) The minimum wage of an unskilled Mazdoor shall be the higher of the wage notified by Government of India, Ministry of Labour and that notified by the local administration both relevant to the place of work and the period of reckoning.
 - d) The escalation for labour also shall be paid at the same quarterly intervals when escalation due to increase in cost of materials is paid under this clause. If such revision of

minimum wages takes place during any such quarterly intervals, the escalation compensation shall be payable at revised rates only for work done in subsequent quarters.

- e) Irrespective of variations in minimum wages of any category of labour, for the purpose of this clause, the variation in the rate for an unskilled Mazdoor alone shall form the basis for working out the escalation compensation payable on the labour component.
- (iv) In the event the price of materials and/or wages of labour required for execution of the work decreases, there shall be a downward adjustment of the cost of work so that such price of materials and/or wages of labour shall be deductible from the cost of work under this Contract and in this regard the formula herein stated below under this Clause 10CC shall mutatis mutandis apply.
- (v) The Contract price shall be adjusted for increase or decrease in rates and prices of labour, cement, steel reinforcement bar supplied by the Contractor, fuel and lubricants and other input materials as per percentage of materials/labour specified in Schedule F and in accordance with the principles, procedures and formulae specified below:

(a) Price adjustment for change in cost shall be paid in accordance with the following formulae: -

(i) For Construction period of this work:

$$Vw = W * (1/100) * [Cp * (CI-CO) / CO + LP * (LI-LO) / LO + CMP * (CMI-CMO) / CMO + EMP * (EMI-EMO) / EMO + FP * (FI-FO) / FO + SP * (SI-SO) / SO + BP * (BI-BO) / BO]$$

(ii) For Maintenance period of this work:

$$Vw = W * (1/100) * [LP * (LI-LO) / LO + CMP * (CMI-CMO) / CMO + EMP * (EMI-EMO) / EMO + BP * (BI-BO) / BO]$$

Where, W=cost of work done as per para (ii) above.

Vw (variation of cost of work) = Increase or decrease in the cost of works during the period under consideration due to change in the rates for relevant components. Percentage components of materials & labour as specified in the schedule F are defined as under:-

CP- Cement Component,

LP-Labour component,

CMP-Civil component of other construction materials,

EMP- E & M component of construction materials,

FP-POL (Diesel) component

SP- Component of Reinforcement steel bars / TMT bars / structural steel (including strands and cables) supplied by the Contractor

BP-Bitumen component

Indices for various components of materials & labour to be used for the purpose of this Clause are defined as under:

CO= Wholesale Price Index for Pozzolana Cement published by office of the Economic Adviser, Ministry of Industry & Commerce valid for the month of last date of receipt of tender including extension, if any.

CI= Wholesale Price Index for Pozzolana Cement published by office of the Economic Adviser, Ministry of Industry & Commerce for the period under consideration.

LO= Minimum daily wage in rupees of an unskilled adult mazdoor, fixed under any law, statutory rule or order as on the last date of receipt of tender including extension, if any.

LI=Minimum wage in rupees of an unskilled adult mazdoor, fixed under any law, statutory rule or order as applicable on the last date of the quarter previous to the one under consideration.

CMO= Price Index for civil components of other construction materials valid for the month of the last date of receipt of tender including extension, if any, as issued by the office of CE CSQ (Civil) or successor of CPWD. In case of such issuance stopped / discontinued by CPWD, same shall get replaced for the subsequent quarters with the indices for Wholesale Price Index for All Commodities published by office of the Economic Adviser, Ministry of Industry & Commerce valid for the month of the last date of receipt of tender including extension, if any.

CMI= Price Index for civil components of other construction materials for the period under consideration and as issued by the office of CE CSQ (Civil) or successor of CPWD. In case of such issuance stopped / discontinued by CPWD, same shall get replaced for the subsequent quarters with the indices for Wholesale Price Index for All Commodities published by office of the Economic Adviser, Ministry of Industry & Commerce valid for the period under consideration.

EMO= Price Index for E & M components construction materials valid for the month of the last date of receipt of tender including extension, if any, as issued by the office of CE CSQ (Electrical) or successor of CPWD. In case of such issuance stopped / discontinued by CPWD, same shall get replaced for the subsequent quarters with the indices for Wholesale Price Index for All Commodities published by office of the Economic Adviser, Ministry of Industry & Commerce valid for the month of the last date of receipt of tender including extension, if any.

EMI= Price Index for E & M components construction materials for the period under consideration and as issued by the office of CE CSQ (Electrical) or successor of CPWD. In case of such issuance stopped / discontinued by CPWD, same shall get replaced for the subsequent quarters with the indices for Wholesale Price Index for All Commodities published by office of the Economic Adviser, Ministry of Industry & Commerce valid for the for the period under consideration.

FO= Wholesale Price Index of HSD (High Speed Diesel) published by office of the Economic Adviser, Ministry of Industry & Commerce valid for the month of the last date of receipt of tender including extension, if any.

FI=Wholesale Price Index of HSD (High Speed Diesel) published by office of the Economic Adviser, Ministry of Industry & Commerce for the period under consideration.

SO= Wholesale Price Index of Mild Steel- long products published by office of the Economic Adviser, Ministry of Industry & Commerce valid for the month of the last date of receipt of tender including extension, if any.

SI= Wholesale Price Index of Mild Steel- long products published by office of the Economic Adviser, Ministry of Industry & Commerce for the period under consideration.

BO= Wholesale Price Index of Bitumen published by office of the Economic Adviser, Ministry of Industry & Commerce valid for the month of the last date of receipt of tender including extension, if any.

BI= Wholesale Price Index of Bitumen published by office of the Economic Adviser, Ministry of Industry & Commerce for the period under consideration.

(vi) Provided always that:

- (a) Where provisions of Clause 10CC are applicable, provisions of Clause 10C will not be applicable.
- (b) Where provisions of Clause 10CC are not applicable, provisions of Clause 10C will become applicable.

(c)

Clause 10 D: Dismantled Material shall be IITB Property:

The Contractor shall treat all materials obtained during dismantling of a structure, excavation of the site for a work, etc. as IITB's property and such materials shall be disposed of to the best advantage of IITB according to the instructions in writing issued by the Engineer-in-Charge.

Clause 11: Work to be Executed in Accordance with Specifications, Drawings, Orders etc.

The Contractor shall execute the whole and every part of the work in the most substantial and workmanlike manner both as regards materials and otherwise in every respect in strict accordance with the specifications. The Contractor shall also conform exactly, fully and faithfully to the design, drawings and instructions in writing in respect of the work signed by the Engineer-in-Charge and the Contractor shall be furnished free of charge one copy of the Contract documents together with specifications, designs, drawings and instructions as are not included in the standard specifications of Central Public Works Department specified in Schedule 'F' or in any Bureau of Indian Standard or any other, published standard or code or, Schedule of Rates or any other printed publication referred to elsewhere in the Contract.

The Contractor shall comply with the provisions of the Contract and with the care and diligence execute and maintain the works and provide all labour and materials, tools and plants including for measurements and supervision of all works, structural plans and other things of temporary or permanent nature required for such execution and maintenance in so far as the necessity for providing these, is specified or is reasonably inferred from the Contract. The Contractor shall take full responsibility for adequacy, suitability and safety of all the works and methods of construction.

Clause 12: Deviations/ Variations Extent and Pricing

The Engineer-in-Charge shall have power (i) to make alteration in, omissions from, additions to, or substitutions for the original specifications, drawings, designs and instructions that may appear to him to be necessary or advisable during the progress of the work, and (ii) to omit a part of the works in case of non-availability of a portion of the site or for any other reasons and the Contractor shall be bound to carry out the works in accordance with any instructions given to him in writing signed by the Engineer-in-Charge and such alterations, omissions, additions or substitutions shall form part of the Contract as if originally provided therein and any altered, additional or substituted work which the Contractor may be directed to do in the manner specified above as part of the works, shall be carried out by the Contractor on the same conditions in all respects including price on which he agreed to do the main work except as hereafter provided.

12.1 The time for completion of the works shall, in the event of any deviations resulting in additional cost over the tendered value sum being ordered be extended, if requested by the Contractor, as follows:

- (i) In the proportion which the additional cost of the altered, additional or substituted work, bears to the original tendered value plus.
- (ii) 25% of the time calculated in (i) above or such further additional time as may be considered reasonable by the Engineer-in-Charge.

12.2 Deviation, Extra Items and Pricing

In the case of extra item(s) (items which are not available in the Contract), the Contractor may within fifteen days of the receipt of order or occurrence of the item(s), submit claim for market rate(s), supported with proper analysis of rate and manufacturer's specification for the work, invoices, vouchers, etc. (as applicable), failing which the rate(s) approved later by the Engineer-in-Charge shall be final and binding. Where the Contractor submits claim for market rate(s) in the manner prescribed above, the Engineer-in-Charge shall, within 45 days of the receipt of the claims, after giving consideration to the analysis of rates and other documents submitted by the

Contractor, determine the rates on the basis of the market rates and the Contractor shall be paid in accordance with the rates so determined.

The rates(s) of extra items so determined by the Engineer-In-Charge shall be final and binding on the Contractor, and shall not be arbitrable.

Deviation, deviated Quantities, Pricing

In the case of the Contract items which exceed the limit laid down in Schedule F, the Contractor may within fifteen days of the receipt of order or occurrence of the excess, claim revision of the rates, supported with proper analysis of rate and invoices, vouchers, etc. (as applicable), for the quantity in excess of the above-mentioned limit. The Engineer-in-charge shall within 45 days of receipt of the claims, after giving consideration to the analysis of rates and other documents submitted by the Contractor, determine the rates on the basis of the market rates and the Contractor shall be paid in accordance with the rates so determined.

The rates(s) of extra items so determined by the Engineer-In-Charge shall be final and binding on the Contractor, and shall not be arbitrable.

12.3 In the case of the Contract items which exceed the limit laid down in Schedule F, the Engineer-in-Charge shall after giving notice to the contractor within 30 days of submission of that bill by the Contractor which contains such item(s), and after taking

into consideration any reply received from the Contractor within 15 days of the issue of such notice, reduce the rate for quantity in excess of the above-mentioned limit on the basis of market rates, within 30 days of the expiry of the said period of 15 days, and the Contractor shall be paid in accordance with the rates so determined.

The rate(s) so determined by the Engineer-in-Charge shall be final and binding on the Contractor, and shall not be arbitrable.

12.4 **Deleted**

12.5 The cost of any operation necessarily in contemplation of tendered while quoting tender or necessary or incidental to proper execution of an item of work included in the Schedule of Quantities or in the Schedule of Rates mentioned in Schedule F, whether or not specifically indicated in the description of the item and the relevant specifications, shall be deemed to be included in the rates quoted by the tenderer or the rate given in the said Schedule of Rates, as the case may be. Nothing extra shall be admissible for such operations.

Clause 13: Foreclosure of Contract due to Abandonment or Reduction in Scope of Work

If at any time after acceptance of the tender or during the progress of work, the purpose or object for which the work is being done changes due to any supervening cause and as a result of which the work has to be abandoned or reduced in scope the Engineer-in-Charge shall give notice in writing to that effect to the Contractor stating the decision as well as the cause for such decision and the Contractor shall act accordingly in the matter. The Contractor shall have no claim to any payment of compensation or otherwise whatsoever, on account of any profit or advantage which he might have derived from the execution of the works in full but which he did not derive in consequence of the foreclosure of the whole or part of the works.

The Contractor shall be paid at Contract rates, full amount for works executed at site and, in addition, a reasonable amount as certified by the Engineer-in-Charge for the items hereunder mentioned which could not be utilized on the work to the full extent in view of the foreclosure;

- (i) Any expenditure incurred on preliminary site work, e.g., temporary access roads, temporary labour huts, staff quarters and site office; storage accommodation and water storage tanks.

- (ii) IITB shall have the option to take over the Contractor's materials or any part thereof either brought to site or of which the Contractor is legally bound to accept delivery from suppliers (for incorporation in or incidental to the work) provided, however IITB shall be bound to take over the materials or such portions thereof as the Contractor does not desire to retain. For materials taken over or to be taken over by IITB, cost of such materials as detailed by Engineer-in- Charge shall be paid. The cost shall, however, take into account purchase price, cost of transportation and deterioration or damage which may have been caused to materials whilst in the custody of the Contractor.
- (iii) Reasonable compensation for transfer of T & P from site to Contractor's permanent stores or to his other works, whichever is less. If T & P are not transported to either of the said places, no cost of transportation shall be payable.
- (iv) Reasonable compensation for repatriation of Contractor's site staff and imported labour to the extent necessary.

The Contractor shall, if required by the Engineer- in-Charge, furnish to him, books of account, wage books, time sheets and other relevant documents and evidence as may be necessary to enable him to certify the reasonable amount payable under this condition.

The reasonable amount of items on (i), (iii) and (iv) above shall not be in excess of 2% of the cost of the work remaining incomplete on the date of closure, i.e., total stipulated cost of the work as per accepted tender less the cost of work actually executed under the Contract and less the cost of Contractor's materials at site taken over by the IITB as per item (ii) above. Provided always that against any payments due to the Contractor on this account or otherwise, the Engineer-in-Charge shall be entitled to recover or be credited with any outstanding balances due from the Contractor for advance paid in respect of any tool, plants and materials and any other sums which at the date of termination were recoverable by the IITB from the Contractor under the terms of the Contract.

In the event of action being taken under Clause 13 to reduce the scope of work, the Contractor may furnish fresh Performance Guarantee on the same conditions, in the same manner and at the same rate for the balance Tendered Amount and initially valid up to the extended date of completion or stipulated date of completion if no extension has been granted plus minimum 60 days beyond that. Wherever such a fresh Performance Guarantee is furnished by the Contractor the Engineer-in-Charge may return the previous Performance Guarantee.

Clause 14: Carrying out part work at risk & cost of Contractor

If the Contractor:

- (i) At any time makes default during currency of work or does not execute any part of the work with due diligence and continues to do so even after a notice in writing of 7 working days in this respect from the Engineer-in-Charge; or
- (ii) Commits default in complying with any of the terms and conditions of the Contract and does not remedy it or takes effective steps to remedy it within 7 working days even after a notice in writing is given in that behalf by the Engineer-in-Charge; or
Fails to complete the work(s) or items of work with individual dates of completion, on or before the date(s) so determined, and does not complete them within the period specified in the notice given in writing in that behalf by the Engineer-in-Charge.
- (iii) The Engineer- in-Charge without invoking action under clause 3 may, without prejudice to any other right or remedy against the Contractor which have either accrued or accrue thereafter to IITB, by a notice in writing to take the part work / part incomplete work of any item(s) out of his hands and shall have powers to :
 - a. Take possession of the site and any materials, constructional plant, implements, stores, etc., thereon; and/or

- b. Carry out the part work / part incomplete work of any item(s) by any means at the risk and cost of the Contractor.

The Engineer-in-Charge shall determine the amount, if any, is recoverable from the Contractor for completion of the part work/ part incomplete work of any item(s) taken out of his hands and execute at the risk and cost of the Contractor, the liability of Contractor on account of loss or damage suffered by IITB because of action under this clause shall not exceed 10% of the tendered value of the work.

In determining the amount, credit shall be given to the Contractor with the value of work done in all respect in the same manner and at the same rate as if it had been carried out by the original Contractor under the terms of his Contract, the value of Contractor's materials taken over and incorporated in the work and use of plant and machinery belonging to the Contractor.

The certificate of the Engineer-in-Charge as to the value of work done shall be final and conclusive against the Contractor provided always that action under this clause shall only be taken after giving notice in writing to the Contractor. Provided also that if the expenses incurred by the department are less than the amount payable to the Contractor at his agreement rates, the difference shall not be payable to the Contractor.

Any excess expenditure incurred or to be incurred by IITB in completing the partwork/ part incomplete work of any item(s) or the excess loss of damages suffered or may be suffered by IITB as aforesaid after allowing such credit shall without prejudice to any other right or remedy available to Government in law or per as agreement be recovered from any money due to the Contractor on any account, and if such money is insufficient, the Contractor shall be called upon in writing and shall be liable to pay the same within 30 days.

If the Contractor fails to pay the required sum within the aforesaid period of 30 days, the Engineer-in-Charge shall have the right to sell any or all of the contractor's' unused materials, constructional plant, implements, temporary building at site etc. and adjust the proceeds of sale thereof towards the dues recoverable from the Contractor under the Contract and if thereafter there remains any balance outstanding, it shall be recovered in accordance with the provisions of the Contract.

In the event of above course being adopted by the Engineer-in-Charge, the Contractor shall have no claim to compensation for any loss sustained by him by reason of his having purchased or procured any materials or entered into any engagements or made any advance on any account or with a view to the execution of the work or the performance of the Contract.

Clause 15: Suspension of Work

- (i) The Contractor shall, on receipt of the order in writing of the Engineer-in-Charge, (whose decision shall be final and binding on the Contractor) suspend the progress of the works or any part thereof for such time and in such manner as the Engineer-in-Charge may consider necessary so as not to cause any damage or injury to the work already done or endanger the safety thereof for any of the following reasons:
 - a. on account of any default on the part of the Contractor or;
 - b. for proper execution of the works or part thereof for reasons other than the default of the Contractor; or
 - c. for safety of the works or part thereof.

The Contractor shall, during such suspension, properly protect and secure the works to the extent necessary and carry out the instructions given in that behalf by the Engineer in- Charge.

- (ii) **If the suspension is ordered for reasons (b) and (c) in sub-para (i) above:**

- a. the Contractor shall be entitled to an extension of time equal to the period of every such suspension PLUS 25%, for completion of the item or group of items of work for which a separate period of completion is specified in the Contract and of which the suspended work forms a part, and;
 - b. If the total period of all such suspensions in respect of an item or group of items or work for which a separate period of completion is specified in the Contract exceeds thirty days, the Contractor shall, in addition, be entitled to such compensation as the Engineer-in- Charge may consider reasonable in respect of salaries and/or wages paid by the Contractor to his employees and labour at site, remaining idle during the period of suspension, adding thereto 2% to cover indirect expenses of the Contractor provided the Contractor submits his claim supported by details to the Engineer-in- Charge within fifteen days of the expiry of the period of 30 days.
- (iii) If the works or part thereof is suspended on the orders of the Engineer-in-Charge for more than three months at a time, except when suspension is ordered for reason (a) in sub para (i) above, the Contractor may after receipt of such order serve a written notice on the Engineer-in-Charge requiring permission within fifteen days from receipt by the Engineer in- Charge of the said notice, to proceed with the work or part thereof in regard to which progress has been suspended and if such permission is not granted within that time, the Contractor, if he intends to treat the suspension, where it affects only a part of the works as an omission of such part by IITB or where it affects whole of the works, as an abandonment of the works by IITB, shall within ten days of expiry of such period of 15 days give notice in writing of his intention to the Engineer-in- Charge. In the event of the Contractor treating the suspension as an abandonment of the Contract by IITB, he shall have no claim to payment of any compensation on account of any profit or advantage which he might have derived from the execution of the work in full but which he could not derive in consequence of the abandonment. He shall, however, be entitled to such compensation, as the Engineer- in-Charge may consider reasonable, in respect of salaries and/or wages paid by him to his employees and labour at site, remaining idle in consequence adding to the total thereof 2% to cover indirect expenses of the Contractor provided the Contractor submits his claim supported by details to the Engineer-in-Charge within 30 days of the expiry of the period of 3 months.

Clause 16: Action in case Work not done as per Specifications.

All works under or in course of execution or executed in pursuance of the Contract, shall at all times be open and accessible to the inspection and supervision of the Engineer-in-Charge, his authorized subordinates in charge of the work and all the superior officers, officer of the Quality Assurance Unit of the Department or any organization engaged by the Department for Quality Assurance and of the Chief Technical Examiner's Office, and the Contractor shall, at all times, during the usual working hours and at all other times at which reasonable notice of the visit of such officers has been given to the Contractor, either himself be present to receive orders and instructions or have a responsible agent duly accredited in writing, present for that purpose. Orders given to the Contractor's agent shall be considered to have the same force as if they had been given to the Contractor himself.

If it shall appear to the Engineer-in-charge or his authorized subordinates in charge of the work or to the Chief Engineer in charge of Quality Assurance or his subordinate officers or the officers of the organization engaged by the Department for Quality Assurance or to the Chief Technical Examiner or his subordinate officers, that any work has been executed with unsound, imperfect, or unskillful workmanship, or with materials or articles provided by him for the execution of the work which are unsound or of a quality inferior to that contracted or otherwise not in accordance with the Contract, the Contractor shall, on demand in writing which shall be

made within twelve months (six months in the case of work costing Rs. 10 Lac and below except road work) of the completion of the work from the Engineer-in-Charge specifying the work, materials or articles complained of notwithstanding that the same may have been passed, certified and paid for forthwith rectify, or remove and reconstruct the work so specified in whole or in part, as the case may require or as the case may be, remove the materials or articles so specified and provide other proper and suitable materials or articles at his own charge and cost. In the event of the failing to do so within a period specified by the Engineer-in-Charge in his demand aforesaid, then the Contractor shall be liable to pay compensation at the same rate as under clause 2 of the Contract (for non-completion of the work in time) for this default.

In such case the Engineer-in-Charge may not accept the item of work at the rates applicable under the Contract but may accept such items at reduced rates as the authority specified in schedule 'F' may consider reasonable during the preparation of on account bills or final bill if the item is so acceptable without detriment to the safety and utility of the item and the structure or he may reject the work outright without any payment and/or get it and other connected and incidental items rectified, or removed and re-executed at the risk and cost of the Contractor. Decision of the Engineer-in-Charge to be conveyed in writing in respect of the same will be final and binding on the Contractor.

Clause 17: Contractor Liable for Damages, defects during defect liability Period

If the Contractor or his working people or servants shall break, deface, injure or destroy any part of building in which they may be working, or any building, road, road kerb, fence, enclosure, water pipe, cables, drains, electric or telephone post or wires, trees, grass or grassland, or cultivated ground contiguous to the premises on which the work or any part is being executed, or if any damage shall happen to the work while in progress, from any cause whatever or if any defect, shrinkage or other faults appear in the work within **24 (twenty four) months** (six months in the case of work costing Rs. Ten lacs and below except road work) after a certificate final or otherwise of its completion shall have been given by the Engineer in-Charge as aforesaid arising out of defect or improper materials or workmanship the Contractor shall upon receipt of a notice in writing on that behalf make the same good at his own expense or in default the Engineer-in-Charge cause the same to be made good by other workmen and deduct the expense from any sums that may be due or at any time thereafter may become due to the Contractor, or from his security deposit or the proceeds of sale thereof or of sufficient portion thereof. The security deposit of the Contractor shall not be refunded before the expiry of **24 (twenty-four) months** (six months in the case of work costing Rs. Ten lakhs and below except road work) after the issue of the certificate final or otherwise, of completion of work, or till the final bill has been prepared and passed whichever is later. Provided that in the case of road work, if in the opinion of the Engineer in-Charge, half of the security deposit is sufficient, to meet all liabilities of the Contractor under this Contract, half of the security deposit will be refundable after six months and the remaining half after twelve months of the issue of the said certificate of completion or till the final bill has been prepared and passed whichever is later.

In case of Maintenance and Operation works of E&M services, the security deposit deducted from contractors shall be refunded within one month from the date of final payment or within one month from the date of completion of the maintenance Contract whichever is earlier.

Clause 18: Contractor to Supply Tools & Plants etc.

The Contractor shall provide at his own cost all materials machinery, tools & plants as specified in schedule F. In addition to this, appliances, implements, other plants, ladders, cordage, tackle, scaffolding and temporary works required for the proper execution of the work, whether original, altered or substituted and whether included in the specifications or other documents forming part of the Contract or referred to in these conditions or not, or which may be necessary for the purpose of satisfying or complying with the requirements of the Engineer-in-Charge as to any matter as to which under these conditions he is entitled to be satisfied, or which he is entitled to require together with carriage therefore to and from the work. The Contractor shall also supply without charge the requisite number of persons with the means and materials, necessary for the

purpose of setting out works, and counting, weighing and assisting the measurement for examination at any time and from time to time of the work or materials. Failing his so doing, the same may be provided by the Engineer-in-Charge at the expense of the Contractor and the expenses may be deducted, from any money due to the Contractor, under this Contract or otherwise and/or from his security deposit or the proceeds of sale thereof, or of a sufficient portion thereof.

Clause 18 A: Recovery of Compensation paid to Workmen.

In every case in which by virtue of the provisions sub- section (1) of section 12 of the Workman's Compensation Act. 1923, IITB is obliged to pay compensation to a workman employed by the Contractor, in execution of the works, IITB will recover from the Contractor ,the amount of the compensation so paid: and without prejudice to the rights of the IITB under sub-section(2) of section 12 , of the said Act, IITB shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or from any sum due by IITB to the Contractor whether under this Contract or otherwise. IITB shall not be bound to contest any claim made against it under sub- section (1) of section 12, of the said Act, except on the written request of the Contractor and upon his giving to IITB full security for all costs for which IITB might become liable in consequence of contesting such claim.

Clause 18B: Ensuring Payment and Amenities to Workers if Contractor fails

In every case in which by virtue of the provisions of the Contract Labour (Regulation and Abolition) Act, 1970, and of the Contract Labour (Regulation and Abolition) Central Rules, 1971, IITB is obliged to pay any amounts of wages to a workman employed by the Contractor in execution of the works, or to incur any expenditure in providing welfare and health amenities required to be provided under the above said Act and the rules under Clause 19H or under the Rules framed by Government from time to time for the protection of health and sanitary arrangements for workers employed by IITB. Contractors, IITB will recover from the Contractor, the amount of wages so paid or the amount of expenditure so incurred; and without prejudice to the rights of the IITB under sub-section (2) of Section 20, and sub-section (4) of Section 21, of the Contract Labour (Regulation and Abolition) Act, 1970, IITB shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or from any sum due by IITB to the Contractor whether under this Contract or otherwise IITB shall not be bound to contest any claim made against it under sub-section (1) of Section 20, sub-section (4) of Section 21, of the said Act, except on the written request of the Contractor and upon his giving to the IITB full security for all costs for which IITB might become liable in contesting such claim.

Clause 19: Labour Laws to be complied by the Contractor.

The Contractor shall comply with the provisions of the Contract Labour (Regulation and Abolition) Act, 1970, and the Contract Labour (Regulation and Abolition) Central Rules, 1971.

The Contractor shall also obtain a valid license under the said Act, before the commencement of the work, and continue to have a valid license until the completion of the work.

The Contractor shall also comply with provisions of the Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Act, 1979.

The Contractor shall also abide by the provisions of the Child and Adolescent Labour (Prohibition and Regulation) Act, 1986.

The Contractor shall also comply with the provisions of the building and other Construction Workers (Regulation of Employment & Conditions of Service) Act, 1996 and the building and other Construction Workers Welfare Cess Act, 1996.

Any failure to fulfil these requirements shall attract the penal provisions of this Contract arising out of the resultant non-execution of the work.

Clause 19A

No labour below the age of 18 (Eighteen) years shall be employed on the work.

Clause 19B: Payment of wages:

- (i) The Contractor shall pay to labour employed by him either directly or through subcontractors, wages not less than fair wages as defined in the C.P.W.D. Contractor's Labour Regulations or as per the provisions of the Contract Labour (Regulation and Abolition) Act, 1970 and the Contract Labour (Regulation and Abolition) Central Rules, 1971, wherever applicable.
- (ii) The Contractor shall, notwithstanding the provisions of any Contract to the contrary, cause to be paid fair wage to labour indirectly engaged on the work, including any labour engaged by his sub-contractors in connection with the said work, as if the labour had been immediately employed by him.
- (iii) In respect of all labour directly or indirectly employed in the works for performance of the Contractor's part of this Contract, the Contractor shall comply with or cause to be complied with the Central Public Works Department Contractor's Labour Regulations made by Government from time to time in regard to payment of wages, wage period, deductions from wages recovery of wages not paid and deductions unauthorizedly made, maintenance of wage books or wage slips publication of scale of wage and other terms of employment, inspection and submission of periodical returns and all other matters of the like nature or as per the provisions of the Contract Labour (Regulation and Abolition) Act, 1970, and the Contract Labour (Regulation and Abolition) Central Rules, 1971, wherever applicable.
- (iv) (a) The Engineer-in-Charge concerned shall have the right to deduct from the moneys due to the Contractor any sum required or estimated to be required for making good the loss suffered by a worker or workers by reason of non-fulfilment of the conditions of the Contract for the benefit of the workers, non-payment of wages or of deductions made from his or their wages which are not justified by their terms of the Contract or non-observance of the Regulations.

(b) Under the provision of Minimum Wages (Central) Rules, 1950, the Contractor is bound to allow to the labours directly or indirectly employed in the works one day rest for 6 days continuous work and pay wages at the same rate as for duty. In the event of default, the Engineer-in-Charge shall have the right to deduct the sum or sums not paid on account of wages for weekly holidays to any labours and pay the same to the persons entitled thereto from any money due to the Contractor by the Engineer-in-Charge concerned.
- (v) The Contractor shall comply with the provisions of the Payment of Wages Act, 1936, Minimum Wages Act, 1948, Employees Liability Act, 1938, Workman's Compensation Act, 1923, Industrial Disputes Act, 1947, Maternity Benefits Act, 1961, and the Contractor's Labour (Regulation and Abolition) Act 1970, or the modifications thereof or any other laws relating thereto and the rules made there under from time to time.
- (vi) The Contractor shall indemnify and keep indemnified IITB against payments to be made under and for the observance of the laws aforesaid and the CPWD. Contractor's Labour Regulations without prejudice to his right to claim indemnity from his sub-contractors.
- (vii) The laws aforesaid shall be deemed to be a part of this Contract and any breach thereof shall be deemed to be a breach of this Contract.
- (viii) Whatever is the minimum wage for the time being, or if the wage payable is higher than such wage, such wage shall be paid by the Contractor to the workmen directly without the intervention of Jamadar and that Jamadar shall not be entitled to deduct or recover

any amount from the minimum wage payable to the workmen as and by way of commission or otherwise.

- (ix) The Contractor shall ensure that no amount by way of commission or otherwise is deducted or recovered by the Jamadar from the wage of workmen.

Clause 19C

In respect of all labour directly or indirectly employed in the work for the performance of the Contractor's part of this Contract, the Contractor shall at his own expense arrange for the safety provisions as per Safety Code framed from time to time and shall at his own expense provide for all facilities in connection therewith. In case the Contractor fails to make arrangement and provide necessary facilities as aforesaid, he shall be liable to pay a penalty as decided by the authority mentioned in Schedule F for each default and in addition, the Engineer-in- Charge shall be at liberty to make arrangement and provide facilities as aforesaid and recover the costs incurred in that behalf from the Contractor.

Clause 19D

The Contractor shall submit by the 4th and 19th of every month, to the Engineer-in-Charge, a true statement showing in respect of the second half of the preceding month and the first half of the current month respectively: -

- (a) the number of labourers employed by him on the work,
- (b) their working hours,
- (c) the wages paid to them,
- (d) the accidents that occurred during the said for night showing the circumstances under which they happened, and the extent of damage and injury caused by them, and
- (e) the number of female workers who have been allowed maternity benefit according to Clause 19 F and the amount paid to them.

Failing which the Contractor shall be liable to pay to IITB, a sum as decided by the authority mentioned in Schedule F for each default or materially incorrect statement. The decision of the Engineer-In-Charge shall be final in deducting from any bill due to the Contractor, the amount levied as fine and be binding on the Contractor.

Clause 19 E

In respect of all labour directly or indirectly employed in the works for the performance of the Contractor's part of this Contract, the Contractor shall comply with or cause to be complied with all the rules framed by Government from time to time for the protection of health and sanitary arrangements for workers employed by the Central Public Works Department and its contractors.

Clause 19F

Leave and pay during leave shall be regulated as follows: -

- 1. Leave:
 - (a) in the case of deliver– - maternity leave not exceeding 8 weeks, 4 weeks up to and including the day of delivery and 4 weeks following that day,
 - (b) in the case of miscarriage - up to 3 weeks from the date of miscarriage.
- 2. Pay:
 - (a) in the case of deliver– - leave pay during maternity leave will be at the rate of the women's average daily earnings, calculated on total wages earned on the days when full time work was done during a period of three months immediately preceding the date

on which she gives notice that she expects to be confined or at the rate of Rupee one only a day whichever is greater.

- (b) in the case of miscarriage - leave pay at the rate of average daily earning calculated on the total wages earned on the days when full time work was done during a period of three months immediately preceding the date of such miscarriage.

3. Conditions for the grant of Maternity Leave:

No maternity leave benefit shall be admissible to a woman unless she has been employed for a total period of not less than six months immediately preceding the date on which she proceeds on leave.

4. The Contractor shall maintain a register of Maternity (Benefit) in the Prescribed Form as shown in Appendix -I and II, and the same shall be kept at the place of work.

Clause 19G

In the event of the Contractor(s) committing a default or breach of any of the provisions of the Central Public Works Department, Contractor's Labour Regulations and Model Rules for the protection of health and sanitary arrangements for the workers as amended from time to time or furnishing any information or submitting or filing any statement under the provisions of the above Regulations and Rules which is materially incorrect, he/they shall, without prejudice to any other liability, pay to the IITB a sum as decided by the authority mentioned in Schedule F for every default, breach or furnishing, making, submitting, filing such materially incorrect statements and in the event of 'he Contractor(s) defaulting continuously in this respect, the penalty may be enhanced to as decided by the authority mentioned in Schedule F per day for each day of default subject to a maximum of 5 percent of the estimated cost of the work put to tender. The decision of the Engineer-in-Charge shall be final and binding on the parties.

Should it appear to the Engineer-in-Charge that the Contractor(s) is/are not properly observing and complying with the provisions of the C.P.W.D. Contractor's Labour Regulations and Model Rules and the provisions of the Contract Labour (Regulation and Abolition) Act 1970, and the Contract Labour (R& A) Central Rules 1971, for the protection of health and sanitary arrangements for work-people employed by the Contractor(s) (hereinafter referred a "the said Rules") the Engineer-in-Charge shall have power to give notice in writing to the Contractor(s) requiring that the said Rules be complied with and the amenities prescribed therein be provided to the work-people within a reasonable time to be specified in the notice. If the Contractor(s) shall fail within the period specified in the notice to comply with and/ observe the said Rules and to provide the amenities to the work-people as aforesaid, the Engineer-in-Charge shall have the power to provide the amenities hereinbefore mentioned at the cost of the Contractor(s). The Contractor(s) shall erect, make and maintain at his/their own expense and as per approved standards all necessary huts and sanitary arrangements required for his/their work-people on the site in connection with the execution of the works, and if the same shall not have been erected or constructed, according to approved standards, the Engineer-in-Charge shall have power to give notice in writing to the Contractor(s) requiring that the said huts and sanitary arrangements be remodelled and/or reconstructed according to approved standards, and if the Contractor(s) shall fail to remodel or reconstruct such huts and sanitary arrangements according to approved standards within the period specified in the notice, the Engineer-in-Charge shall have the power to remodel or reconstruct such huts and sanitary arrangements according to approved standards at the cost of the Contractor(s).

Clause 19H – Deleted

~~The Contractor(s) shall at his/their own cost provide his/their labour with a sufficient number of huts (hereinafter referred to as the camp) of the following specifications on a suitable plot of land to be approved by the Engineer in Charge.~~

- (a) ~~The minimum height of each hut at the eaves level shall be 2.10 m (7 ft.) and the floor area to be provided will be at the rate of 2.7 sq.m. (30 sq.ft.) for each member of the worker's family staying with the labourer.~~
- (b) ~~The Contractor(s) shall in addition construct suitable cooking places having a minimum area of 1.80 m x 1.50 m '6"5') adjacent to the hut for each family.~~
- (c) ~~The Contractor(s) shall also construct temporary latrines and urinals for the use of the labourers each on the scale of not less than four per each one hundred of the total strength, separate latrines and urinals being provided for women.~~
- (d) ~~The Contractor(s) shall construct sufficient number of bathing and washing places, one unit for every 25 persons residing in the camp. These bathing and washing places shall be suitably screened.~~
- (e) ~~All the huts shall have walls of sun-dried or burnt bricks laid in mud mortar or other suitable local materials as may be approved by the Engineer-in-Charge. In case of sundried bricks, the walls should be plastered with mud gobri on both sides. The floor may be kutchra but plastered with mud gobri and shall be at least 15 cm "6") above the surrounding ground. The roofs shall be laid with thatch or any other materials as may be approved by the Engineer-in-Charge and the Contractor shall ensure that throughout the period of their occupation, the roofs remain water tight.~~
- (f) ~~The Contractor(s) shall provide each hut with proper ventilation.~~
- (g) ~~All doors, windows, and ventilators shall be provided with suitable leaves for security purposes.~~
- (h) ~~There shall be kept an open space of at least 7.2 m (8 yards) between the rows of huts which may be reduced to 6 m (20 ft.) according to the availability of site with the approval of the Engineer-in-Charge. Back-to-back construction will be allowed.~~
- (i) ~~Water Supply — The Contractor(s) shall provide adequate supply of water for the use of labourers. The provisions shall not be less than two gallons of pure and wholesome water per head per day for drinking purposes and three gallons of clean water per head per day for bathing and washing purposes. Where piped water supply is available, supply shall be at stand posts and where the supply is from wells or river, tanks which may be of metal or masonry, shall be provided. The Contractor(s) shall also at his/ their own cost make arrangements for laying pipe lines for water supply to his/ their labour camp from the existing mains wherever available, and shall pay all fees and charges therefore.~~
- (j) ~~(j) The site selected for the camp shall be high ground, removed from jungle.~~
- (k) ~~Disposal of Excreta — The Contractor(s) shall make necessary arrangements for the disposal of excreta from the latrines by trenching or incineration which shall be according to the requirements laid down by the Local Health Authorities. If trenching or incineration is not allowed, the Contractor(s) shall make arrangements for the removal of the excreta through the Municipal Committee/authority and inform it about the number of labourers employed so that arrangements may be made by such Committee/authority for the removal of the excreta. All charges on this account shall be borne by the Contractor and paid direct by him to the Municipality/authority. The Contractor shall provide one sweeper for every eight seats in case of dry system.~~
- (l) ~~Drainage — The Contractor(s) shall provide efficient arrangements for draining away sullage water so as to keep the camp neat and tidy.~~
- (m) ~~The Contractor(s) shall make necessary arrangements for keeping the camp area sufficiently lighted to avoid accidents to the workers.~~

- (n) ~~Sanitation—The Contractor(s) shall make arrangements for conservancy and sanitation in the labour camps according to the rules of the Local Public Health and Medical Authorities.~~

Clause 19I

The Engineer-in-Charge may require the Contractor to dismiss or remove from the site of the work any person or persons in the contractor's' employ upon the work who may be incompetent or misconduct himself and the Contractor shall forthwith comply with such requirements. In respect of maintenance/repair or renovation works etc. where the labour has an easy access to the individual houses, the Contractor shall issue identity cards to the labourers, whether temporary or permanent and he shall be responsible for any untoward action on the part of such labour.

Clause 19J

It shall be the responsibility of the contractor to see that the building under construction is not occupied by anybody unauthorized during construction, and is handed over to the Engineer-in-Charge with vacant possession of complete building. If such building though completed is occupied illegally, then the Engineer-in-Charge shall have the option to refuse to accept the said building/buildings in that position. Any delay in acceptance on this account will be treated as the delay in completion and for such delay, a levy up to 5% of tendered value of work may be imposed by the Engineer-In-Charge whose decision shall be final both with regard to the justification and quantum and be binding on the Contractor.

However, the Engineer-In-Charge through a notice, may require the contractor to remove the illegal occupation any time on or before construction and delivery.

Clause 19K: Employment of skilled/semi-skilled workers

The Contractor shall, at all stages of work, deploy skilled/semi-skilled tradesmen who are qualified and possess certificate in particular trade from CPWD Training Institute / Industrial Training Institute / National Institute of Construction Management and Research (NICMAR)/ National Academy of Construction, CIDC or any similar reputed and recognized Institute managed/ certified by State/Central Government. The number of such qualified tradesmen shall not be less than 20% of total skilled/semi-skilled.

Workers required in each trade at any stage of work. The Contractor shall submit number of man days required in respect of each trade, its scheduling and the list of qualified tradesmen along with requisite certificate from recognized Institute to Engineer in charge for approval. Notwithstanding such approval, if the tradesmen are found to have inadequate skill to execute the work of respective trade, the Contractor shall substitute such tradesmen within two days of written notice from Engineer-in- Charge. Failure on the part of Contractor to obtain approval of Engineer-in-Charge or failure to deploy qualified tradesmen will attract a compensation to be paid by Contractor at the rate specified in schedule 'F' per such tradesman per day. Decision of Engineer-in-Charge as to whether particular tradesman possesses requisite skill and amount of compensation in case of default shall be final and binding.

Provided always, that the provisions of this clause, shall not be applicable for works with estimated cost put to tender being less than Rs. 5 crores.

For work costing more than Rs. 10 Crores, and up to Rs. 50 Crores, the Contractor shall arrange on site training as per National Skill Development Corporation (NSDC) norms for at least 20% of the unskilled workers engaged in the project in co-ordination with the CPWD Regional Training Institute & National Skill Development Corporation (NSDC) for certification at the level of skilled/semi-skilled tradesmen.

For works costing more than Rs. 50 Crores, the Contractor shall arrange on site training as per National Skill Development Corporation (NSDC) norms for at least 30% of the unskilled worker engaged in the project in co-ordination with the CPWD Regional Training Institute &

National Skill Development Corporation (NSDC) for certification at the level of skilled/semi-skilled tradesmen. The cost of such training as stated above shall be borne by the Contractor. The necessary space and workers shall be provided by the Contractor and no claim what so ever shall be entertained.

Clause 19L: Contribution of EPF and ESI

The ESI and EPF contributions on the part of employer in respect of this Contract shall be paid by the Contractor. These contributions on the part of the employer paid by the Contractor shall be reimbursed by the Engineer-in-charge to the Contractor on actual basis. The verification of deployment of labour will be done through biometric attendance system or any other suitable method by the Engineer in Charge. The applicable and eligible amount of EPF & ESI shall be reimbursed preferably within 7 days but not later than 30 days of submission of documentary proof of payment provided same are in order.

Clause 20: Minimum Wages Act to be Complied With

The Contractor shall comply with all the provisions of the Minimum Wages Act, 1948, and Contract Labour (Regulation and Abolition) Act, 1970, amended from time to time and rules framed there under and other labour laws affecting Contract labour that may be brought into force from time to time.

Clause 21: Work not to be sublet. Action in case of insolvency

The Contract shall not be assigned or sublet without the written approval of the Engineer-in-Charge. And if the Contractor shall assign or sublet his Contract, or attempt to do so, or become insolvent or commence any insolvency proceedings or make any composition with his creditors or attempt to do so, or if any bribe, gratuity, gift, loan, perquisite, reward or advantage pecuniary or otherwise, shall either directly or indirectly, be given, promised or offered by the Contractor, or any of his servants or agent to any public officer or person in the employ of IITB in any way relating to his office or employment, or if any such officer or person shall become in any way directly or indirectly interested in the Contract, the Engineer-in-Charge on behalf of the Director, IITB shall have power to adopt the course specified in Clause 3 hereof in the interest of IITB and in the event of such course being adopted, the consequences specified in the said Clause 3 shall ensue.

Clause 22

All sums payable by way of compensation under any of these conditions shall be considered as reasonable compensation to be applied to the use of IITB without reference to the actual loss or damage sustained and whether or not any damage shall have been sustained.

Clause 23: Changes in firm's Constitution to be Intimated.

Where the Contractor is a partnership firm, the previous approval in writing of the Engineer-in-Charge shall be obtained before any change is made in the constitution of the firm. Where the Contractor is an individual or a Hindu undivided family business concern, such approval as aforesaid shall likewise be obtained before the Contractor enters into any partnership agreement where under the partnership firm would have the right to carry out the works hereby undertaken by the Contractor. If previous approval as aforesaid is not obtained, the Contract shall be deemed to have been assigned in contravention of Clause 21 hereof and the same action may be taken, and the same consequences shall ensue as provided in the said Clause 21.

Clause 24: Life Cycle Cost

The Contractor shall be responsible for safety, quality and soundness of the buildings including structural elements beyond maintenance period. The Contractor shall have obligation to rectify such defects minimum up to 2 (Two) years from the date of completion of work. The defects have to be rectified within a reasonable time not exceeding seven (7) working days after issue of notice by Engineer- in- Charge. If Contractor does not take

corrective action after 7 working days, then action for debarring of the agency shall be taken by the appropriate authority.

Clause 25: Settlement of Disputes & Arbitration

Except where otherwise provided in the Contract, all questions and disputes relating to the meaning of the specifications, design, drawings and instructions here-in before mentioned and as to the quality of workmanship or materials used on the work or as to any other question, claim, right, matter or thing whatsoever in any way arising out of or relating to the Contract, designs, drawings, specifications, estimates, instructions, orders or these conditions or otherwise concerning the works or the execution or failure to execute the same whether arising during the progress of the work or after the cancellation, termination, completion or abandonment thereof shall be dealt with as mentioned hereinafter:

- (i) Conciliation : If the contractor considers any work demanded of him to be outside the requirements of the Contract, or disputes any drawings, record or decision given in writing by the Engineer-in-Charge or if the Engineer in Charge considers any act or decision of the Contractor on any matter in connection with or arising out of the Contract or carrying out of the work, to be unacceptable and is disputed, such Contractor shall within 15 days of the arising of the disputes first refer to Superintending Engineer (Estate Office), IITB who acts as Engineer-In-Charge (EIC). If the decision of EIC is not acceptable to the Contractor, either party shall promptly within 15 days request to Deputy Director (FEA) IITB (DD(FEA)). In case of the decision of DD(FEA) is not acceptable, the matter shall be taken up with the Director IITB, who shall refer the disputes to Dispute Redressal Committee (DRC) within 15 days along with a list of disputes with amounts claimed if any in respect of each such dispute. The Dispute Redressal Committee (DRC) give its decision within a period of 60 days extendable by 30 days by consent of both the parties. The constitution of Dispute Redressal Committee (DRC) shall be as indicated in Schedule 'F'. Provided that no party shall be represented before the Dispute Redressal Committee by an advocate / legal counsel etc.

The DRC will submit its decision to the Director IITB for acceptance. Director IITB will in a time limit of 30 days from receipt of DRC decision will convey acceptance or otherwise on the said decision. If the Dispute Redressal Committee (DRC) fails to give its decision within the aforesaid period or the Director IITB fails to give his decision in the aforesaid time limit or any party is dissatisfied with the decision of Dispute Redressal Committee (DRC)/ Director IITB then either party may within a period of 30 days from the receipt of the decision of Dispute Redressal Committee (DRC) / Director IITB or on expiry of aforesaid the time limits available to DRC) / Director IITB ,may give notice to the Chairman, Board of Governors, IITB (BOG) for appointment of arbitrator on prescribed proforma as per Appendix XVII under intimation to the other party.

It is a term of Contract that each party invoking arbitration must exhaust the aforesaid mechanism of settlement of claims / disputes prior to invoking arbitration.

The Chairman (BOG) shall in such case appoint the sole arbitrator or one of the three arbitrators as the case may be within 30 days of receipt of such a request and refer such disputes to arbitration. Wherever the Arbitral Tribunal consists of three Arbitrators, the Contractor shall appoint one arbitrator within 30 days of making request for arbitration or of receipt of request by Engineer-in-charge to DD(FEA) for appointment of arbitrator, as the case may be, and two appointed arbitrators shall appoint the third arbitrator who shall act as the Presiding Arbitrator. In the event of

- (a) A party fails to appoint the second Arbitrator, or
(b) The two appointed Arbitrators fail to appoint the Presiding Arbitrator, then the Chairman (BOG) shall appoint the second or Presiding Arbitrator as the case may be.

- (ii) Dispute or difference shall be referred for adjudication through arbitration by a Tribunal having sole arbitrator where claimed amount is Rs 100 Crore or less. Where claimed Value is more than Rs. 100 Crore, Tribunal shall consist of three Arbitrators as above. The requirements of the Arbitration and Conciliation Act, 1996 (26 of 1996) and any further statutory modification or re-enactment thereof and the rules made there under and for the time being in force shall be applicable.

It is a term of this Contract that the party invoking arbitration shall give a list of disputes with amounts claimed, if any, in respect of each such dispute along with the notice for appointment of arbitrator and giving reference to the decision of the DD(FEA) on the finding / recommendation of DRC.

It is also a term of this Contract that member of the Arbitration Tribunal shall be a Graduate Engineer with experience in handling public works engineering contracts, and further he shall have earlier worked at a level not lower than Chief Engineer/ equivalent (i.e. Joint Secretary level of Government of India). This shall be treated as a mandatory qualification to be appointed as arbitrator.

Parties, before or at the time of appointment of Arbitral Tribunal may agree in writing for fast-track arbitration as per the Arbitration and Conciliation Act, 1996 (26 of 1996) as amended in 2015.

Subject to provision in the Arbitration and Conciliation Act, 1996 (26 of 1996) as amended in 2015 whereby the counter claims if any can be directly filed before the arbitrator without any requirement of reference by the appointing authority. The arbitrator shall adjudicate on only such disputes as are referred to him by the appointing authority and give separate award against each dispute and claim referred to him and, in all cases, where the total amount of the claims by any party exceeds Rs. 1,00,000/-, the arbitrator shall give reasons for the award.

It is also a term of the Contract that fees payable to arbitral tribunal shall be as approved by IITB, this fee shall be shared equally by parties.

The place of arbitration shall be as mentioned in Schedule F. In case there is no mention of place of arbitration, the arbitral tribunal shall determine the place of arbitration.

The venue of the arbitration shall be such place as may be fixed by the Arbitral Tribunal in consultation with both the parties. Failing any such agreement, then the Arbitral Tribunal shall decide the venue.

Clause 26: Contractor to Indemnify IITB against Patent Rights

The Contractor shall fully indemnify and keep indemnified the Director IITB against any action, claim or proceeding relating to infringement or use of any patent or design or any alleged patent or design rights and shall pay any royalties which may be payable in respect of any article or part thereof included in the Contract. In the event of any claims made under or action brought against IITB in respect of any such matters as aforesaid, the Contractor shall be immediately notified thereof and the Contractor shall be at liberty, at his own expense, to settle any dispute or to conduct any litigation that may arise there from, provided that the Contractor shall not be liable to indemnify the Director IITB if the infringement of the patent or design or any alleged patent or design right is the direct result of an order passed by the Engineer-in-Charge in this behalf.

Clause 27: Lumpsum Provisions in Tender.

When the estimate on which a tender is made includes lump sum in respect of parts of the work, the Contractor shall be entitled to payment in respect of the items of work involved or the part of the work in question at the same rates as are payable under this Contract for such items, or if the part of the work in question is not, in the opinion of the Engineer-in-Charge payable of measurement, the Engineer-in-Charge may at his discretion pay the lump-sum amount entered

in the estimate, and the certificate in writing of the Engineer-in-Charge shall be final and conclusive against the Contractor with regard to any sum or sums payable to him under the provisions of the clause.

Clause 28: Action where no Specifications are Specified.

In the case of any class of work for which there is no such specifications as referred to in Clause 11, such work shall be carried out in accordance with the Bureau of Indian Standards Specifications. In case there are no such specifications in Bureau of Indian Standards, the work shall be carried out as per manufacture's' specifications, if not available then as per state/ District Specifications. In case there are no such specifications as required above, the work shall be carried out in all respects in accordance with the instructions and requirements of the Engineer-in-Charge.

Clause 29: Withholding and lien in respect of sum due from Contractor:

- (a) Whenever any claim or claims for payment of a sum of money arises out of or under the Contract or against the Contractor, the Engineer-in-Charge or the IITB shall be entitled to withhold and also have a lien to retain such sum or sums in whole or in part from the security, if any deposited by the Contractor and for the purpose aforesaid, the Engineer-in-Charge or the IITB shall be entitled to withhold the security deposit, if any, furnished as the case may be and also have a lien over the same pending finalization or adjudication of any such claim. In the event of the security being insufficient to cover the claimed amount or amounts or if no security has been taken from the Contractor, the Engineer-in-Charge or the IITB shall be entitled to withhold and have a lien to retain to the extent of such claimed amount or amounts referred to above, from any sum or sums found payable or which may at any time thereafter become payable to the Contractor under the same Contract or any other Contract with the Engineer-in-Charge of the IITB or any contracting person through the Engineer-in- Charge pending finalization of adjudication of any such claim.

It is an agreed term of the Contract that the sum of money or moneys so withheld or retained under the lien referred to above by the Engineer-in-Charge or IITB will be kept withheld or retained as such by the Engineer-in-Charge or IITB till the claim arising out of or under the Contract is determined by the arbitrator (if the Contract is governed by the arbitration clause) by the competent court, as the case may be and that the Contractor will have no claim for interest or damages whatsoever on any account in respect of such withholding or retention under the lien referred to above and duly notified as such to the Contractor. For the purpose of this clause, where the Contractor

is a partnership firm or a limited company, the Engineer-in-Charge or the IITB shall be entitled to withhold and also have a lien to retain towards such claimed amount or amounts in whole or in part from any sum found payable to any partner/limited company as the case may be, whether in his individual capacity or otherwise.

- (b) IITB shall have the right to cause an audit and technical examination of the works and the final bills of the Contractor including all supporting vouchers, abstract, etc., to be made after payment of the final bill and if as a result of such audit and technical examination any sum is found to have been overpaid in respect of any work done by the Contractor under the Contract or any work claimed to have been done by him under the Contract and found not to have been executed, the Contractor shall be liable to refund

the amount of overpayment and it shall be lawful for IITB to recover the same from him in the manner prescribed in sub-clause (j) of this clause or in any other manner legally permissible; and if it is found that the Contractor was paid less than what was due to him under the Contract in respect of any work executed by him under it, the amount of such under payment shall be duly paid by IITB to the Contractor, without any interest thereon whatsoever.

Provided that the IITB shall not be entitled to recover any sum overpaid, nor the Contractor shall be entitled to payment of any sum paid short where such payment has been agreed upon between the Engineer-in-charge on the one hand and the Contractor on the other under any term of the Contract permitting payment for work after assessment by the Engineer-in-charge.

Clause 29A: Lien in respect of claims in other Contracts:

Any sum of money due and payable to the Contractor (including the security deposit returnable to him) under the Contract may be withheld or retained by way of lien by the Engineer-in-Charge or the IITB or any other contracting person or persons through Engineer-in-Charge against any claim of the Engineer-in-Charge or IITB or such other person or persons in respect of payment of a sum of money arising out of or under any other Contract made by the Contractor with the Engineer-in-Charge or the IITB or with such other person or persons. It is an agreed term of the Contract that the sum of money so withheld or retained under this clause by the Engineer-in-Charge or the IITB will be kept withheld or retained as such by the Engineer-in-Charge or the IITB or till his claim arising out of the same Contract or any other Contract is either mutually settled or determined by the arbitration clause or by the competent court, as the case may be and that the Contractor shall have no claim for interest or damages whatsoever on this account or on any other ground in respect of any sum of money withheld or retained under this clause and duly notified as such to the Contractor.

Clause 29B: Employment of coal mining or controlled area labour not Permissible

The Contractor shall not employ coal mining or controlled area labour falling under any category whatsoever on or in connection with the work or recruit labour from area within a radius of 32 km (20 miles) of the controlled area. Subject as above the Contractor shall employ imported labour only i.e., deposit imported labour or labour imported by contractors from area, from which import is permitted. Where ceiling price for imported labour has been fixed by State or Regional Labour Committees not more than that ceiling price shall be paid to the labour by the Contractor. The

Contractor shall immediately remove any labourer who may be pointed out by the Engineer in Charge as being a coal mining or controlled area labourer. Failure to do so shall render the Contractor liable to pay to IITB a sum calculated at the rate of Rs.10/- per day per labourer. The certificate of the Engineer-in-Charge about the number of coal mining or controlled area labourer and the number of days for which they worked shall be final and binding upon all parties to this Contract. It is declared and agreed between the parties that the aforesaid stipulation in this clause is one in which the public are interested within the meaning of the exception in Section 74 of Indian Contract Act, 1872.

Explanation: - Controlled Area means the following areas:

Districts of Dhanbad, Hazaribagh, Jamtara - a Sub-Division under Santhal Pargana Commissioner, Districts of Bankura, Birbhum, Burdwan, District of Bilaspur. Any other area which may be declared a Controlled Area by or with the approval of the Central Government.

Clause 30: Water for Works

Water connection shall be provided by Institute at one point near the site. The Contractor shall make his own arrangement for tapping at multiple locations and distribution network for which nothing extra shall be paid.

Clause 30A: Alternate water Arrangements: (Deleted)

~~The Contractor shall be allowed to construct temporary wells in IITB land for taking water for construction purposes only after he has got permission of the Engineer in Charge in writing. No charges shall be recovered from the Contractor on this account, but the Contractor shall be required to provide necessary safety arrangements to avoid any accidents or damage to adjacent buildings, roads and service lines. He shall be responsible for any accidents or damage caused due to construction and subsequent maintenance of the wells and shall restore the ground to its original condition after the wells are dismantled on completion of the work. If any approvals are required for temporary wells, the same has to be obtained by the agency from statutory authorities.~~

Clause 31: Hire of Plant & Machinery

The Contractor shall arrange at his own expense all tools, plant, machinery and equipment (hereinafter referred to as T&P) required for execution of the work.

Clause 32: Employment of Technical Staff and employees

Contractors Superintendence, Supervision, Technical Staff & Employees

- (i) The Contractor shall provide all necessary superintendence during execution of the work and all along thereafter as may be necessary for proper fulfilling of the obligations under the Contract

The Contractor shall immediately after receiving letter of acceptance of the tender and before commencement of the work, intimate in writing to the Engineer-in-Charge, the name(s), qualifications, experience, age, address(s) and other particulars along with certificates, of the principal technical representative to be in charge of the work and other technical representative(s) who will be supervising the work. Minimum requirement of such technical representative(s) and their qualifications and experience shall not be lower than specified in Schedule 'F'. Even if the Contractor (or partner(s) in case of firm/ company) is himself / herself an Engineer, it is necessary on the part of the Contractor to Employ principal technical representative / technical representative (s) as per stipulation in Schedule 'F'.

The Engineer-in-Charge shall within 3 days of receipt of such communication intimate in writing his approval or otherwise of such a representative(s) to the Contractor. Any such approval may at any time be withdrawn and in case of such withdrawal, the Contractor shall appoint another such representative(s) according to the provisions of this clause. Decision of the tender accepting authority shall be final and binding on the Contractor in this respect. Such a principal technical representative and other technical representative(s) shall be appointed by the Contractor soon after receipt of the approval from Engineer-in-charge and shall be available at site before start of work.

All the provisions applicable to the principal technical representative under the Clause will also be applicable to other technical representative(s) The principal technical representative and other technical representative(s) shall be present at the site of work for supervision at all times when any construction activity is in progress and also present himself/themselves, as required, to the Engineer-in-Charge and/or his designated representative to take instructions. Instructions given to the principal technical representative or other technical representative(s) shall be deemed to have the same force as if these have been given to the Contractor. The principal technical representative and other technical representative(s) shall be actually available at site fully during all stages of execution of work, during recording/checking/test checking of measurements of works and whenever so required by the Engineer-in-Charge and shall also note down instructions conveyed by the Engineer-in-Charge or his designated representative(s) in the site order book and shall affix his/their signature in token of noting down the instructions and in token of acceptance of measurements/checked measurements/ test checked measurements. The representative(s) shall not look after any other work. Substitutes, duly approved by

Engineer-in-Charge of the work in similar manner as aforesaid shall be provided in event of absence of any of the representative(s) by more than two days.

If the Engineer-in-Charge, whose decision in this respect is final and binding on the Contractor, is convinced that no such technical representative(s) is/are effectively appointed or is/are effectively attending or fulfilling the provision of this clause, a recovery (non-refundable) shall be effected from the Contractor as specified in Schedule 'F' and the decision of the Engineer-In-Charge as recorded in the site order book and measurement recorded checked/test checked in Measurement Books shall be final and binding on the Contractor. Further if the Contractor fails to appoint suitable technical Principal technical representative and/or other technical representative(s) and if such appointed persons are not effectively present or are absent by more than two days without duly approved substitute or do not discharge their responsibilities satisfactorily, the Engineer-in-Charge shall have full powers to suspend the execution of the work until such date as suitable other technical representative(s) is/are appointed and the Contractor shall be held responsible for the delay so caused to the work. The Contractor shall submit a certificate of employment of the technical representative(s) (in the form of copy of Form-16 or CPF deduction issued to the Engineers employed by him) along with every on-account bill/ final bill and shall produce evidence if at any time so required by the Engineer-in-Charge.

- (ii) The Contractor shall provide and employ on the site only such technical assistants as are skilled and experienced in their respective fields and such foremen and supervisory staff as are competent to give proper supervision to the work.

The Contractor shall provide and employ skilled, semiskilled and unskilled labour as is necessary for proper and timely execution of the work.

The Engineer-in-Charge shall be at liberty to object to and require the Contractor to remove from the works any person who in his opinion misconducts himself, or is incompetent or negligent in the performance of his duties or whose employment is otherwise considered by the Engineer-in-Charge to be undesirable. Such person shall not be employed again at works site without the written permission of the Engineer-in-Charge and the persons so removed shall be replaced as soon as possible by competent substitutes.

Clause 33: Levy/Taxes payable by Contractor:

- (i) GST, Building and other Construction Workers Welfare Cess or any other tax, levy or Cess in respect of input for or output by this Contract shall be payable by the Contractor and IITB shall not entertain any claim whatsoever in this respect except as provided under Clause 34.
- (ii) The Contractor shall deposit royalty and obtain necessary permit for supply of the red bajri, stone, kankar, etc. from local authorities.

If pursuant to or under any law, notification or order any royalty, cess or the like becomes payable by the IITB and does not any time become payable by the Contractor to the State Government, Local authorities in respect of any material used by the Contractor in the works, then in such a case, it shall be lawful to the IITB and it will have the right and be entitled to recover the amount paid in the circumstances as aforesaid from dues of the Contractor.

Note: Regarding GST contractor may refer Part D1 - Percentage Quote on Estimated Amount and Abstract of Price.

Clause 34: Conditions for reimbursement of levy / taxes if levied after receipt of Tenders:

- (i) All tendered rates shall be inclusive of any tax, levy or cess applicable on last stipulated date of receipt of tender including extension if any. No adjustment i.e. increases or decrease shall be made for any variation in the rate of GST, Building and Other Construction Workers Welfare Cess or any tax, levy or cess applicable on inputs.

However, effect of variation in rates of GST or Building and Other Construction Workers Welfare Cess or imposition or repeal of any other tax, levy or cess applicable on output of the works Contract shall be adjusted on either side, increase or decrease.

Provided further that for Building and Other Construction Workers Welfare Cess or any tax (other than GST), levy or cess varied or imposed after the last date of receipt of tender including extension if any, any increase shall be reimbursed to the Contractor only if the Contractor necessarily and properly pays such increased amount of taxes / levies / cess.

Provided further that such increase including GST shall not be made in the extended period of Contract for which the Contractor alone is responsible for delay as determined by authority for extension of time under Clause 5 in Schedule F.

- (ii) The Contractor shall keep necessary books of accounts and other documents for the purpose of this condition as may be necessary and shall allow inspection of the same by a duly authorized representative of the IITB and/or the Engineer-in-Charge and shall also furnish such other information/document as the Engineer-in-Charge may require from time to time.
- (iii) The Contractor shall, within a period of 30 days of the imposition of any such further tax or levy or cess, or variation or repeal of such tax or levy or cess give a written notice thereof to the Engineer-in-charge that the same is given pursuant to this condition, together with all necessary information relating thereto.

Clause 35: Termination of Contract on death of the Contractor:

Without prejudice to any of the rights or remedies under this Contract, if the Contractor dies, the Engineer-in-Charge on behalf of the Director IITB shall have the option of terminating the Contract without levy of compensation to the Contractor.

Clause 36: If relative working in IITB then the Contractor not allowed to tender

The Contractor shall not be permitted to tender for works in the IITB responsible for award and execution of contracts in which his near relative is posted as IITB officer. He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any Officer in the IITB or in the Ministry of Housing and Urban Affairs. Any breach of this condition by the Contractor would render him liable to be removed from the approved list of contractors of this Department. If, however the Contractor is registered in any other department, he shall be debarred from tendering in IITB for any breach of this condition.

NOTE: By the term "near relatives" is meant wife, husband, parents and grandparents, children and grandchildren, brothers and sisters, uncles, aunts and cousins and their corresponding in-laws.

Clause 37: No Gazetted Engineer to work as Contractor within one year of retirement:

No engineer of gazetted rank or other gazetted officer employed in engineering or administrative duties in an engineering department of the Government of India shall work as a Contractor or employee of a Contractor for a period of one year after his retirement from government service without the previous permission of Government of India in writing. This Contract is liable to be cancelled if either the Contractor or any of his employees is found at any time to be such a person who had not obtained the permission of Government of India as

aforesaid, before submission of the tender or engagement in the Contractor's service, as the case may be.

Clause 38: Theoretical consumption of Material

- (i) After completion of the work and also at any intermediate stage in the event of Non reconciliation of materials issued theoretical quantity of materials used in the work shall be calculated on the basis and method given hereunder: -
 - (a) Quantity of cement & bitumen shall be calculated on the basis of quantity of cement & bitumen required for different items of work as shown in the Schedule of Rates mentioned in Schedule 'F'. In case any item is executed for which standard constants for the consumption of cement or bitumen are not available in the above-mentioned schedule/statement or cannot be derived from the same shall be calculated on the basis of standard formula to be laid down by the Engineer-in-Charge.
 - (b) Theoretical quantity of steel reinforcement or structural steel sections shall be taken as the quantity required as per design or as authorized by Engineer-in- Charge, including authorized laps, chairs etc. plus 3% wastage due to rolling margins, cutting into pieces, such theoretical quantity being determined and compared with the actual, each diameter wise, section wise and category wise separately.
 - (c) Theoretical quantity of G.I. & C.I. or other pipes, conduits, wires and cables, pig lead and G.I./M.S. sheets shall be taken as quantity actually required and measured plus 5% for wastage due to cutting into pieces (except in the case of G.I./M.S. sheets it shall be 10%), such determination & comparison being made diameter wise & category wise.
 - (d) For any other material as per actual requirements.

Over the theoretical quantities of materials so computed a variation shall be allowed as specified in Schedule 'F'. For non-scheduled items, the decision of Engineer-In-Charge regarding theoretical quantities of materials which should have been actually used, shall be final and binding on the Contractor.

- (ii) The said action under this clause is without prejudice to the right of the IITB to take action against the Contractor under any other Conditions of the Contract for not doing the work according to the prescribed specifications.

Clause 39: Compensation during war like situations:

The work (whether fully constructed or not) and all materials, machines, tools and plants, scaffolding, temporary buildings and other things connected therewith shall be at the risk of the Contractor until the work has been delivered to the Engineer-in-Charge and a certificate from him to that effect obtained. In the event of the work or any materials properly brought to the site for incorporation in the work being damaged or destroyed in consequence of hostilities or warlike operation, the Contractor shall when ordered (in writing) by the Engineer-in-Charge to remove any debris from the site, collect and properly stack or remove in store all serviceable materials salvaged from the damaged work and shall be paid at the Contract rates in accordance with the provision of this agreement for the work of clearing the site of debris, stacking or removal of serviceable material and for reconstruction of all works ordered by the Engineer- in-Charge, such payments being in addition to compensation up to the value of the work originally executed before being damaged or destroyed and not paid for. In case of works damaged or destroyed but not already measured and paid for, the compensation shall be assessed by the Engineer-in-charge up to Rs 2,00,000/ -- and by the next higher officer concerned for a higher amount. The Contractor shall be paid for the damages/destruction suffered and for restoring the material at the rate based on analysis of rates tendered for in accordance with the provision of the Contract. The certificate of the Engineer-in-Charge regarding the quality and quantity of materials and the purpose for which they were collected shall be final and binding on all parties to this Contract.

Provided always that no compensation shall be payable for any loss in consequence of hostilities or warlike operations (a) unless the Contractor had taken all such precautions against air raid as are deemed necessary by the A.R.P. (Air Raid precaution) Officers or the Engineer-in-Charge (b) for any material etc. not on the site of the work or for any tools, plant, machinery, scaffolding, temporary building and other things not intended for the work. In the event of the Contractor having to carry out reconstruction as aforesaid, he shall be allowed such extension of time for its completion as is considered reasonable by the Engineer-in-charge.

Clause 40: Apprentices Act provisions to be complied with

The Contractor shall comply with the provisions of the Apprentices Act, 1961 and the rules and orders issued there under from time to time. If he fails to do so, his failure will be a breach of the Contract and the Engineer-in-charge may, in his discretion, cancel the Contract. The Contractor shall also be liable for any pecuniary liability arising on account of any violation by him of the provisions of the said Act.

Clause 41: Release of Security deposit after labour clearance

The Security Deposit of the work shall be refunded if no labour complaint has been received from the labour officer till the due date of its payment. If a labour complaint is received during this period, the Engineer-in-Charge shall, after issue of notice in this regard to the Contractor, deduct the amount required to settle the complaint from his security deposit and refund the balance amount.

6.3 ADDITIONAL CONDITIONS OF THE CONTRACT:

- (i) The Contractors are advised to inspect and examine the site and its surroundings and satisfy themselves with the nature of site, the means of access to the site, constraints put by local regulations, if any, weather conditions at site, general ground / subsoil conditions etc. or any other circumstances which may affect or influence their tenders. The Contractor shall carry out survey of the work area at his own cost, setting out the layout and fixing of alignment of the building as per architectural and Structural drawings in consultation with the Superintending Engineer (Estate Office). Any discrepancy between the architectural drawings and actual layout at site shall be brought to the notice of the Superintending Engineer (Estate Office). It shall be responsibility of the Contractor to ensure correct setting out of alignment. Nothing extra shall be payable on this account. No claims, whatsoever, shall be entertained at a later date for any errors found, on plea that the information supplied by the IITB in the tender is insufficient or is at variance with the actual site conditions.
- (ii) The Contractor shall, if required by him, before submission of the tender, inspect the drawings in the Office of the Superintending Engineer (Estate Office). The IITB shall not bear any responsibility for the lack of knowledge and also the consequences, thereof to the Contractor. The information and data shown in the drawings and mentioned in the tender documents have been furnished, in good faith, for general information and guidance only. Superintending Engineer (Estate Office), in no case, shall be held responsible for the accuracy thereof and/or interpretations or conclusions drawn there from by the Contractor and all consequences shall be borne by the Contractor. No claim, whatsoever, shall be entertained from the Contractor, if the data or information furnished in tender document is different or in-correct otherwise or actual working drawings are at variance with the drawings available for inspection or attached to the tender documents. It is presumed that the Contractor shall satisfy himself for all possible contingencies, incidental charges, wastages, bottlenecks etc. likely during execution of work and acts of coordination, which may be required between different agencies. Nothing extra shall be payable on this account.
- (iii) Sub-soil investigation report of work site is available in the office of the Superintending Engineer (Estate Office)). Interested bidders can go through the report if required for their guidance. However, the Bidder is advised to obtain requisite details directly as may be considered necessary by him before quoting rates in the tender. No claim whatsoever on account of any discrepancy between the sub-surface strata conditions that may be actually encountered at the time of execution of the work and those available in the report shall be entertained under any circumstances. The ground water table is a variable condition and the information given in the report is only indicative and it may vary from time to time.
- (iv) The nomenclature of the item given in the schedule of quantities gives in general the work content but is not exhaustive i.e., does not mention all the incidental works required to be carried out for complete execution of the item of work. The work shall be carried out, all in accordance with true intent and meaning of the specifications and the drawings taken together, regardless of whether the same may or may not be particularly shown on the drawings and/or described in the specifications, provided that the same can be reasonably inferred. There may be several incidental works, which are not mentioned in the nomenclature of each item but will be necessary to complete the item in all respects. All these incidental works / costs which are not mentioned in item nomenclature but are necessary to complete the item shall be deemed to have been included in the rates quoted by the Contractor for various items in the schedule of quantities. No adjustment of rates shall be made for any variation in quantum of incidental works due to variation / change in actual working drawings. Also, no adjustment of rates shall be made due to any change in incidental works or any other deviation in such element of work (which is incidental to the items of work and are necessary to complete such items in all respects) on account of the directions of

- Superintending Engineer (Estate Office). Nothing extra shall be payable on this account.
- (v) The Contractor(s) shall give to the local body, police and other authorities all necessary notices etc. that may be required by law and obtain all requisite licenses for temporary obstructions, enclosures etc. and pay all fee, taxes and charges which may be leviable on account of these operations in executing the Contract. He shall make good any damage to the adjoining property whether public or private and shall supply and maintain lights either for illumination or for cautioning the public at night.
 - (vi) The Contractor(s) shall take all precautions to avoid accidents by exhibiting necessary caution boards day and night. In case of any accident of labours/ contractual staff the entire responsibility will rest on the part of the Contractor and any compensation under such circumstances, if becomes payable, shall be entirely borne by the Contractor.
 - (vii) The work shall generally be carried out in accordance with the latest “CPWD Specifications” with up-to-date correction slips, additional/Particular Specifications, architectural/Structural drawings and as per instructions of Superintending Engineer (Estate Office). Any additional item of the work, if taken up subsequently, shall also confirm to the CPWD / other relevant specifications as mentioned above.
 - (viii) Several documents forming the tender are to be taken as mutually complementary to one another. Detailed drawings shall be followed in preference to small scale drawings and figured dimensions in preference to scale dimensions.
 - (ix) The works to be governed by this Contract shall cover delivery and transportation up to destination, safe custody at site, insurance, erection, testing and commissioning of the entire works.
 - (x) The works to be undertaken by the Contractor shall inter-alia include the following:
 - a. Preparation of detailed SHOP drawings and AS BUILT drawings wherever applicable.
 - b. Obtaining of Statutory permission is in the scope of Architectural consultant appointed by IITB. The agency has to assist in providing AS-BUILT drawing etc.
 - c. Pre-commissioning tests as per relevant standard specifications, code of practice, Acts and Rules wherever required.
 - d. Warranty obligation for the equipment's and / or fittings/fixtures supplied by the Contractor. Contractor shall provide all the shop drawings or layout drawings for all the coordinated services before starting any work or placing any order of any of the services etc. These shop drawings/layout drawings shall be got approved from Superintending Engineer (Estate Office) / Architect before implementation and this shall be binding on the Contractor. The Contractor shall submit material submittals along with material sample for approval of Superintending Engineer (Estate Office) / Architect prior to delivery of material at site.
 - (xi) The work shall be carried out in accordance with the approved architectural drawings, structural drawings, services drawings to be issued from time to time, by the Engineer-in-Charge. Before commencement of any item of work the Contractor shall correlate all the relevant architectural and structural drawings, nomenclature of items and specifications etc. issued for the work and satisfy himself that the information available from there is complete and unambiguous. The figure and written dimension of the drawings shall be superseding the measurement by scale. The discrepancy, if any, shall be brought to the notice of the Superintending Engineer (Estate Office) before

execution of the work. The Contractor alone shall be responsible for any loss or damage occurring by the commencement of work on the basis of any erroneous and or incomplete information and no claim whatsoever shall be entertained by the IITB on this account.

- (xii) Unless otherwise provided in the Schedule of quantities vide Part-D2 and the percentage tendered by the Contractor shall be all inclusive and shall apply to all heights, lifts, leads

and depths of the building and nothing extra shall be payable to him on this account.

- (xiii) The Contractor(s) shall take instructions from the Superintending Engineer (Estate Office) regarding collection and stacking of materials at any place. No excavated earth or building rubbish shall be stacked on areas where other buildings, roads, services and compound walls are to be constructed. The stacking shall take place as per stacking plan however, if any change is required, the same shall be done with the approval of Superintending Engineer (Estate Office).
- (xiv) The Contractor shall bear all incidental charges for cartage, storage and safe custody of materials, if any, issued by IITB as well as to those materials also arranged by the Contractor.
- (xv) Any cement slurry added over base surface (or) for continuation of concreting for better bond is deemed to have been built in the items and nothing extra shall be payable or extra cement considered in consumption on this account.
- (xvi) The Contractor shall give performance test of the entire installation(s) as per the specifications in the presence of the Superintending Engineer (Estate Office) or his authorized representative before the work is finally accepted and nothing extra whatsoever shall be payable to the Contractor for such test.
- (xvii) Prevention of Nuisance and Pollution Control

The Contractor shall take all necessary precautions to prevent any nuisance or inconvenience to the owners, tenants or occupiers of adjacent properties and to the public in general and to prevent any damage to such properties from pollutants like smoke, dust, noise. The Contractor shall use such methodology and equipment so as to cause minimum environmental pollution of any kind and minimum hindrance to road users and to occupants of the adjacent properties or other services running adjacent/near vicinity. The Contractor shall make good at his cost and to the satisfaction of the Superintending Engineer (Estate Office), any damage to roads, paths, cross drainage works or public or private property whatsoever caused due to the execution of the work or by traffic brought thereon by the Contractor. All waste or superfluous materials shall be carried away by the Contractor, without any reservation, entirely to the satisfaction of the Superintending Engineer (Estate Office).

- (xviii) Security and Traffic Arrangements

- (xix) In the event of any restrictions being imposed by the Security agency, Traffic or any other authority having jurisdiction in the area on the working or movement of labour / material, the Contractor shall strictly follow such restrictions and nothing extra shall be payable to the Contractor on such accounts. The loss of time on these accounts, if any, shall have to be made up by augmenting additional resources whatever required.

- (xx) No payment shall be made for any damage caused by rain, snowfall, flood or any other natural calamity, whatsoever during the execution of the work. The Contractor shall be fully responsible for any damage to the govt. property and the work for which payment has been advanced to him under the Contract and he shall make good the same at his risk and cost. The Contractor shall be fully responsible for safety and security of his material, T&P/Machinery brought to the site by him.

- (xxi) The Contractor shall construct suitable godowns, yard at the site of work for storing all other materials so as to be safe against damage by sun, rain, damages, fire, theft etc. at his own cost and also employ necessary watch and ward establishment for the purpose at his cost.
- (xxii) All materials obtained from Contractor shall be got checked by the representative of Engineer- in-Charge on receipt of the same at site before use.
- (xxiii) The Contractor shall be responsible for the watch and ward/guard of the buildings, safety of all fittings and fixtures including all equipment's, services provided by him against pilferage and breakage during the period of Installations and thereafter till the building is physically handed over to the IITB, the Client IITB. No extra payment shall be made on this account and no claim shall be admissible on this account.
- (xxiv) The Contractor shall keep himself fully informed of all acts and laws of the Central & State Governments, all orders, decrees of statutory bodies, tribunals having any jurisdiction or authority, which in any manner may affect those engaged or employed and anything related to carrying out the work. All the rules & regulations and bye-laws laid down by Collector / MCGM and any other statutory bodies shall be adhered to, by the Contractor, during the execution of work. The Contractor shall also adhere to all traffic restrictions notified by the local authorities. The water charges (for municipal water connection as well as tanker water) shall be borne by the Contractor. Also, if the Contractor obtains water connection for the drinking purposes from the municipal authorities or any other statutory body, the consequent charges shall be borne by the Contractor. All statutory taxes, levies, charges (including water and sewerage charges, charges for temporary service connections and / or any other charges) payable to such authorities for carrying out the work, shall be borne by the Contractor. The Contractor shall arrange to give all notices as required by any statutory / regulatory authority and shall pay to such authority all the fees that is required to be paid for the execution of work. He shall protect and indemnify the IITB and its officials & employees against any claim and / or liability arising out of violations of any such laws, ordinances, orders, decrees, by himself or by his employees or his authorized representatives. Nothing extra shall be payable on these accounts. The fee payable to statutory authorities for obtaining the various permanent service connections and Occupancy Certificate for the building shall be borne by the IITB.
- (xxv) For works below ground level the Contractor shall keep that area free from water. If de-watering or bailing out of water is required, the Contractor shall do the same at his own cost and nothing extra shall be paid.
- (xxvi) The Contractor shall make all necessary arrangements for protecting from rains, fog or likewise extreme weather conditions, the work already executed and for carrying out further work, during monsoon including providing and fixing temporary shelters, protections etc. Nothing extra shall be payable on this account and also no claims for hindrance shall be entertained on this account.
- (xxvii) In case of flooding of site on account of rain or any other cause and any consequent damage, whatsoever, no claim financially or otherwise shall be entertained notwithstanding any other provisions elsewhere in the Contract agreement. Also, the Contractor shall make good, at his own cost, the damages caused, if any. Further, no claims for hindrance shall be entertained on this account.
- (xxviii) The Contractor will take reasonable precautions to prevent his workman and employees from removing and damaging any flora (tree/plant/vegetation) from the project area.

6.3.1 Setting out Works:

- (i) The Contractor shall carry out survey of the work area, at his own cost, setting out the layout of buildings/ roads/ services in consultation with the Engineer -in-Charge & proceed further. Any discrepancy between architectural drawings and actual layout at

site shall be brought to the notice of the Engineer -in-charge. It shall be responsibility of the Contractor to ensure correct setting out of alignment. Total station survey instruments only shall be used for layout, fixing boundaries, and centre lines, etc., Nothing extra shall be payable on this account.

- (ii) The Contractor shall establish, maintain and assume responsibility for grades, lines, levels and benchmarks. He shall report any errors or inconsistencies regarding grades, lines, levels, dimensions etc. to the Engineer -in-Charge before commencing work. Commencement of work shall be regarded as the Contractor's acceptance of such grades, lines, levels, and dimensions and no claim shall be entertained at a later date for any errors found.
- (iii) If at any time, any error appears due to grades, lines, levels and benchmarks during the progress of the work, the Contractor shall, at his own expense rectify such error, if so required, to the satisfaction of the Engineer -in-Charge. Nothing extra shall be payable on this account.
- (iv) The Contractor shall protect and maintain temporary/ permanent benchmarks at the site of work throughout the execution of work. These benchmarks shall be got checked by the Superintending Engineer (Estate Office) or his authorized representatives. The work at different stages shall be checked with reference to bench marks maintained for the said purpose. Nothing extra shall be payable on this account.
- (v) The approval by the Superintending Engineer (Estate Office) of the setting out by the Contractor, shall not relieve the Contractor of any of his responsibilities and obligation to rectify the errors/ defects, if any, which may be found at any stage during the progress of the work or after the completion of the work.
- (vi) The Contractor shall be entirely and exclusively responsible for the horizontal, vertical and other alignments, the level and correctness of every part of the work and shall rectify effectively any errors or imperfections therein. Such rectifications shall be carried out by the Contractor at his own cost to the entire satisfaction of the Engineer- in-Charge.
- (vii) The Tended Amount by the Contractor is deemed to be inclusive of site clearance, setting out work (including marking of reference points, Centre lines of buildings), construction and maintenance of reference bench mark(s), taking spot levels, construction of all safety and protection devices, barriers, barricading, signage, labour safety, labour welfare and labour training measures, preparatory works, working during monsoon, working at all depths, height and location etc. and any other incidental works required to complete this work. Nothing extra shall be payable on this account.

6.3.2 Site Testing Laboratory

A site laboratory with the minimum equipment's as specified in CPWD specifications/in this agreement shall be established, made functional and maintained within one month from the award of work as per clause 10A of schedule A to F without any extra cost to the IITB. In case of non-compliance / delay in compliance in this, a recovery @ Rs. 500/- per day will be imposed which will be recovered from the immediate next R/A Bill of the Contractor.

6.3.3 Tools and Plants:

The bidder should have own constructions equipment required for the proper and timely execution of the work. Nothing extra shall be paid on this account. No tools and plants including any special T&P etc. shall be supplied by the IITB and the Contractor shall have to make his own arrangements at his own cost. No claim of hindrance (or any other claim) shall be entertained on this account.

6.3.4 MS steel Scaffolding:

Wherever required for the execution of work, all the MS steel scaffolding shall be provided and suitably fixed, by the Contractor. It shall be provided strictly with steel double scaffolding system, suitably braced for stability, with all the accessories, gangways, etc. with adjustable suitable working platforms to access the areas with ease for working and inspection. It shall be designed to take all incidental loads. It should cater to the safety features for workmen. Nothing extra shall be payable on this account. It shall be ensured that no damage is caused to any structure due to the scaffolding.

Steel double scaffolding shall be adopted for all plastering works with strict compliance to safety regulations as per IS 4014-Part II. Scaffolding shall be properly planned and designed by the Contractor. It shall be approved by Engineer-In-Charge before commencement of work. Double scaffolding, sufficiently strong so as to withstand all loads likely to come upon it and having two sets of vertical supports, shall be provided.

Scaffolding for external plaster shall be supported independent of walls as far as possible to avoid patchy appearance. Where two sets of supports are not possible, the inner end of the horizontal scaffolding member shall rest in a hole provided in the masonry. Such holes shall be filled up immediately after removal of scaffolding with suitable concrete so as not to exhibit any leakage and dampness.

For internal plastering, scaffolding shall be erected independent of walls. No member of scaffolding shall be allowed to be housed in the walls being treated with plaster.

The following measures shall be considered while erecting the scaffolding.

1. Sufficient sills or under pinning in addition to base plates shall be provided particularly where scaffoldings are erected on soft grounds.
2. Adjustable bases to compensate for uneven ground shall be used.
3. Proper anchoring of the scaffolding / staging at reasonable intervals shall be provided in each case with the main structure, wherever available.
4. Horizontal braces shall be provided to prevent the scaffolding from rocking.
5. Diagonal braces shall be provided continuously from bottom to top between two adjacent rows of uprights.
6. The scaffolding shall be checked at every stage for plumb line.
7. All nuts and bolts shall be properly tightened.
8. Wherever steel tubes are used care shall be taken that all the clamps/ couplings are firmly tightened so as to avoid any slippage.

6.3.5 Schedule and Deployments (Personnel and Equipment)

The Contractor shall do proper sequencing of the various activities by suitably staggering the activities within various pockets in the plot so as to achieve early completion. The agency to deploy adequate equipment, machinery and labour as required for the completion of the entire work within the stipulated period specified. Also, ancillary facilities shall be provided by Contractor commensurate with requirement to complete the entire work within the stipulated period. Nothing extra shall be payable on this account. Adequate number/sets of equipment in working condition, along with adequate stand-by arrangements, shall be deployed during entire construction period. It shall be ensured by the Contractor that all the equipment, Tools & Plants, machineries etc. provided by him are maintained in proper working conditions at all times during the progress of the work and till the completion of the work. Further, all the constructional tools, plants, equipment and machineries provided by the Contractor, on site of work or his workshop for this work, shall be exclusively used in the construction of this work and they shall not be shifted/ removed from site without the permission of the Engineer- in- Charge.

6.3.6 The Contractor shall maintain all the work in good condition till the completion of entire work. The Contractor shall be responsible for and shall make good, all damages and repairs, rendered necessary due to fire, rain, traffic, floods or any other causes. The

Engineer-in- Charge shall not be responsible for any claims for injuries to person/workmen or for structural damage to property happening from any neglect, default, want of proper care or misconduct on the part of the Contractor or of any other of his representatives, in his employment during the execution of the work. The compensation, if any, shall be paid directly to the IITB/ authority / persons concerned, by the Contractor at his own cost.

6.3.7 Royalty:

Royalty at the prevalent rates shall be paid by the Contractor or the RMC supplier as per the terms of supply between them, on all materials such as boulders, metals, all sizes stone aggregates, brick aggregates, coarse and fine sand, murum, earth, river sand, gravels and bajri etc. collected by him for the execution of the work, directly to the revenue authority of the state government concerned. Further, the Contractor needs to submit proof of submission of full royalty to the state government or local authority. Nothing extra shall be payable on this account.

6.3.8 Preservation and Conservation measures

- (i) Existing drains, pipes, cables, over-head wires, sewer lines, water lines and similar services, if any, encountered in the course of the execution of work shall be protected against the damage by the Contractor at his own expense. In case the same are to be removed and diverted, expenditure incurred in doing so shall be payable to the Contractor. The Contractor shall work out the cost, get the same approved by Superintending Engineer (Estate Office) before taking up actual execution. The Contractor shall not store materials or otherwise occupy any part of the site in a manner likely to hinder the operation of such services.
- (ii) All fossils, coins, articles of value of antiquity, structures and other remains or things of geological or archaeological interest discovered on project location during excavation/construction shall be the property of the Government, and shall be dealt with as per provisions of the relevant legislation. The Contractor will take reasonable precaution to prevent his work men or any other persons from removing and damaging any such article or thing. He will, immediately upon discovery thereof and before removal acquaint the Engineer- in-charge of such discovery and carry out the official instructions of Engineer-in- charge for dealing with the same, till then all work shall be carried out in a way so as not to disturb/damage such article or thing.

6.3.9 Responsibility:

- (i) He shall protect and indemnify IITB and its officials & employees against any claim and /or liability arising out of violations of any such laws, ordinances, orders, decrees, by himself or by his employees or his authorized representatives. Nothing extra shall be payable on these accounts.
- (ii) The Contractor shall assume all liability, financial or otherwise in connection with this Contract and shall protect and indemnify the IITB from any and all damages and claims that may arise on any account. The Contractor shall indemnify the IITB against all claims in respect of patent rights, royalties, design, trademarks- of name or other protected rights, damages to adjacent buildings, roads or members of public, in course of execution of work or any other reasons whatsoever and shall himself defend all actions arising from such claims and shall indemnify the IITB in all respect from such actions, costs and expenses. Nothing extra shall be payable on this account.
- (iii) The entire work up to the plinth level, as required for obtaining approval of the plinth from the local authority, shall be completed by the Contractor at the same time. Work above plinth shall be allowed to be carried out only after obtaining plinth approval from the local body. No delay shall be allowed on this ground and also no claim whatsoever on account of any delay in approval at plinth level by the local body shall be entertained from the Contractor. Nothing extra shall be payable on this account.
- (iv) On completion of work, the Contractor shall submit required sets of “as built” drawings to the Superintending Engineer (Estate Office) furnishing requisite information for obtaining various service connections.

6.3.10 Co-operation with other contractors / specialized agencies / associated contractors:

- (i) The Contractor shall take all precautions to abide by the environmental related restrictions imposed by any statutory body having jurisdiction in the area as well as prevent any pollution of streams, ravines, river bed and waterways. All waste or superfluous materials shall be transported by the Contractor, entirely to the satisfaction of the Engineer- in-Charge and disposed at designated places only. No claim what so ever on account of site constraints mentioned above or any other site constraints, lack of

public transport, inadequate availability of skilled, semi-skilled or unskilled workers in the near vicinity, non-availability of construction machinery spare parts and any other constraints not specifically stated here, shall be entertained from the Contractor. Therefore, the Tenderers are advised to visit site and get first- hand information of site constraints. Accordingly, they should quote their tenders. Nothing extra shall be payable on this account.

- (ii) The Contractor shall cooperate with and provide the facilities to the associate contractors and other agencies working at site for smooth execution of the work. The Contractor shall indemnify IITB against any claim(s) arising out of such disputes. The Contractor shall:

- a) Allow use of scaffolding, toilets, sheds etc.
 - b) Properly co-ordinate their work with the work of other contractors.
 - c) Provide control lines and benchmarks to his associate contractors and the other contractors.
 - d) Provide electricity and water at mutually agreed rates.
 - e) Provide hoist and crane facilities for lifting material at mutually agreed rates.
 - f) Co-ordinate with other contractors for leaving inserts, making chases, alignment of services etc. at site.
 - g) Adjust work schedule and site activities in consultation with the Engineer- in-Charge and other contractors to suit the overall schedule completion.
 - h) Resolve the disputes with other contractors/ associate contractors amicably and the Superintending Engineer (Estate Office) shall not be made intermediary or arbitrator.
- (iii) The work should be planned in a systematic manner so as to ensure proper co-ordination of various disciplines viz. sanitary & water supply, drainage, rain water harvesting, electrical, firefighting & fire alarm system, information technology, communication & electronics and any other services.

6.3.11 Supervision of Works:

The Contractor shall depute Site Engineer & skilled workers as required for the work. He shall submit organization chart along with details of Engineers and supervisory staff. It shall be ensured that all decision-making powers shall be available to the representatives of the Contractor at Mumbai itself to avoid any likely delays on this account. The Contractor shall also furnish list of persons for specialized works to be executed for various items of work. The Contractor shall identify and deploy key persons having qualifications and experience in the similar and other major works, as per the field of their expertise. If during the course of execution of work, the Superintending Engineer (Estate Office) is of the opinion that the deployed staff is not sufficient or not well experienced, the Contractor shall deploy more staff or better- experienced staff at site to complete the work with quality and in stipulated time limit. Principle Technical

representative of the Contractor having minimum experience in similar nature of work as mentioned in the clause 36 of the General Conditions of the Contract, shall always be available at the site during the actual execution of the work.

6.3.12 Eligible Criteria for specialized sub heads of the Contract Works

1. The successful bidder upon award shall have to associate the specialized agencies / firms for carrying out each specialized sub heads separately with the prior approval of the Engineer- In-Charge. Eligibility Criteria for each of specialized Sub Head are as below. However, if the Contractor himself satisfies the eligibility criteria for any sub head, then the Contractor may carry out that work after getting the approval from the Engineer-in- charge.
2. The tenderer whose tender is accepted shall indicate the name(s) of his associated specialized agencies those fulfilling the eligibility criteria laid down below after award of work and at least 90 days before commencement of such items for the approval of the Engineer-in-Charge, whose decision shall be final and binding. If the tenderer, having valid electrical license applicable for E.I. works, himself fulfils the eligibility criteria laid down below for associated specialized agencies, then the tenderer shall not require associating with himself the associated specialized agency.
3. Only reputed, technically qualified / OEM authorized Integrators or companies with sound financial state having past experience are to be engaged for carrying out sub head works. The Contractor shall provide necessary Documents, Evidence, Financial soundness and authorized dealer certificate to support their selection and seek approval of IITB prior to award of the Work. No traders or fair-weather suppliers should be engaged in Installation, Supply & Commissioning activity. Joint ventures are not accepted.
4. List of Specialized Items / Jobs of Electrical & Mechanical Works: Supplying / Fabrication, installation, testing and commissioning of the following:
 - I. LIST A
 - a. Lifts
 - b. Public address system
 - c. Security system, rodent control, etc.
 - d. VRV/VRF Type Air-Conditioning Systems
 - e. CCTV and Allied Equipment
 - f. Access Control System
 - g. IT Networking system
 - h. SITC of Solar Photo Voltaic Power generation system
 - i. Electronic / Digital Signages
 - II. LIST B
 - a. Electrical supply and Distribution system
 - b. Heating, Ventilation and Air-conditioning system (excluding VRF)
 - c. Fire Fighting system (including wet riser and sprinkler system, portable fire extinguisher)
 - d. Fire Detection and Alarm System
5. The Main contractor shall associate specialized agencies for execution of each of the E&M works forming part of this tender.
6. The eligibility criteria of sub-agencies for works indicated under **List A** and completed in the last 7 years, ending last day of the month previous to the one in which tenders are invited are as follows:
 - a. Three similar works each costing not less than 40% of the corresponding

Award value of the respective specialized sub head of the Contract Work

OR

- b. Two similar works each costing not less than 60% of the corresponding Award value of the respective specialized sub head of the Contract Work

OR

- c. One similar works each costing not less than 80% of the corresponding Award value of the respective specialized sub head of the Contract Work.

7. The eligibility criteria of sub-agencies for works indicated under **List B** and completed in the last 7 years are as follows:

- a. Three similar works each of value not less than 40% of corresponding Award value of the respective specialized sub head of the Contract Work with total capacity being 80% of individual capacity (rounded off to next available higher capacity) of the components as indicated in the table below.

OR

- b. Two similar works each of value not less than 60% of the corresponding Award value of the respective specialized sub head of the Contract Work with total capacity being 80% of individual capacity (rounded off to next available higher capacity) of the components as indicated in the table below.

OR

- c. One similar works of value not less than 80% of the estimated cost put to tender with capacity of being 80% of capacity (rounded off to next available higher capacity) of the components as indicated in the table below:

8. Following table indicates size and capacities of specialized works under List B for the purpose of evaluation:

Sr.	Components as per List B	Estimated Cost excluding GST	Indicative Sizes / Capacities / Criteria
1	Internal civil finishes work	₹ 1370 Lakhs	58%
2	Electrical works	₹ 272 Lakhs	13%
3	Firefighting work	₹ 100 Lakhs	7%
4	HVAC work	₹ 232 lakhs	10%
5	Audio visual system	128 lakhs	5%
6	Lighting Management System	42 Lakhs	2%

7	Signages & Furniture work	128 Lakhs	5%
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9. For selection of sub-agency (Specialised Agency) for Façade works detailed under sub-section of the **BOQ – PART X** and its relevant Technical Specifications, list of approved makes and Drawings, the main Contractor shall engage sub-agencies based on above minimum criteria of work carried out.
 - 9.1 The Contractor & his agencies shall be responsible for preparation of shop drawings for approval of Engineer-in-charge, supply, installation, testing commissioning and design validation of items as detailed out in the BOQ/specifications. **Contractor to submit Structural; stability certificate for Structural steel and any other items designed by the Contractor.**
 - 9.2 The Contractor and the associated specialized agency shall provide a Notarized Memorandum of Understanding (MOU) to confirm their association for the above laboratory scope of work for approval of the Engineer-In-Charge.
 - 9.3 The Contractor shall ensure, through it's specialized sub-agency, that all works are covered under a Defect Liability Period (DLP) of 24 months from the date of commissioning. This period shall include full responsibility for the performance, maintenance, defects, and the supply of all spares necessary for the smooth and healthy functioning of the entire system, ensuring compliance with the specified operational parameters.
 - 9.4 Further, the Contractor shall provide an extended Defect Liability Period of 7 years (inclusive of the initial 24-month period) solely against corrosion of structural steel work for roofing. During this period, the Contractor shall address any corrosion-related defects, including but not limited to the replacement of corroded components, to ensure the integrity and operational effectiveness of the facilities installed by them.
 - 9.5 All contractual mechanisms, including but not limited to bank guarantees, bonds, and retention funds, ensuring coverage during both the 24-month general DLP and the extended 7-year corrosion-related DLP (including 24 months general DLP), shall be formalized and submitted for approval to the Engineer-in-Charge prior to the award of scope to any Sub-Agency or Original Equipment Manufacturer (OEM).
 - 9.6 Contractor shall provide the Guarantee bond for Waterproofing System scope delivered by specialized sub-agency as per the prescribed format under Article 12.5. (iii).
10. It shall be the responsibility of the Contractor to sort out any dispute / litigation with the Specialized Agencies without any time & cost overrun to IITB. The Contractor shall be solely responsible for settling any dispute / litigation arising out of his agreement with the Specialized Agencies. The Contractor shall ensure that the work shall not suffer on account of litigation/ dispute between him and the specialized agencies. No claim of hindrance in the work shall be entertained from the Contractor on this account. No extension of time shall be granted and no claim whatsoever, of any kind, shall be entertained from the Contractor on account of delay attributable to the selection/rejection of the Specialized Agencies or any dispute amongst them.

6.3.13 Quality Assurance and Testing of Materials:

- (i) All material to be used in the work shall bear ISI certification mark unless otherwise the make is specified in the BOQ, list of approved makes and other conditions / specifications, appended with this Tender document. In case ISI mark materials or the materials mentioned in the tender documents are not available, the material to be used shall conform to CPWD specifications applicable to this Tender and / or national /

international codes as approved by Superintending Engineer (Estate Office). In such cases, the Engineer-in-charge shall satisfy himself about the quality of such materials and give his approval in writing. Only articles classified, as first quality by the manufacturers / suppliers shall be used in the work, unless otherwise specified. All materials not having ISI mark, if allowed to be used in the work by Superintending Engineer (Estate Office), shall be tested as per relevant specifications, as approved by the Superintending Engineer (Estate Office). In all cases of use of ISI marked materials, proper proof of procurement of materials from authentic manufacturers shall be provided by the Contractor to the entire satisfaction of Engineer in charge. The mass procurement of material should be done only after approval of IITB in writing.

- (ii) The Contractor shall make available, on request from IITB, the copies of challan, cash memos, receipts and other certificates, if any, vouchers towards the quantity and quality of various materials procured for the work and the same shall be kept in record. The Contractor shall also provide information and necessary documentation on the name of the manufacturer, manufacturer's product identification, manufacturer's instructions, warning, date of manufacturing and test certificates (from manufacturers for the product
- (iii) Inspection of Electrical items at Manufacturers works by consultant and client's representative will have to be arranged by contractors if it is intended by Engineer in charge.
- (iv) The Contractor has to establish field laboratory at site including all necessary equipment for field tests as given in Schedule 'F'. All the relevant and applicable standards and specifications shall be made available by the Contractor at his cost in the field laboratory. The Contractor shall designate one of his technical representatives as Quality Assurance Engineer, who shall be responsible for carrying out all mandatory filed/ laboratory tests. The Contractor shall also provide adequate supporting staff at his cost for carrying out field tests, packaging & forwarding of samples for outside laboratory tests and for maintaining test records. All the registers of tests carried out at site or in outside laboratories shall be maintained by the Contractor. All the entries in the test register will be made by the designated engineer of the Contractor and same shall be regularly reviewed by the Superintending Engineer (Estate Office) or his authorized representatives at site.
- (v) The Contractor shall submit, immediately after the award of work, a detailed and complete 'Method Statement' for the execution, testing and Quality Assurance, of such items of works, as directed by the Superintending Engineer (Estate Office). All the materials to be used in the work shall comply with the requirements of the specifications and shall pass all the tests required as per specifications as applicable or such specifications / standards as directed by the Superintending Engineer (Estate Office).
- (vi) The Contractor shall procure and provide all the materials from the manufacturers / suppliers as per the list attached with the tender documents, as per the item description and particular specifications for the work. The equivalent brand for any item shall be permitted to be used in the work, only when the specified make is not available. This is, however, subject to documentary evidence produced by the contractor regarding non availability of the specified brand and also subject to independent verification by the Superintending Engineer (Estate Office). In exceptional cases, where such approval is required, the decision of Superintending Engineer (Estate Office) as regards equivalent make of the material shall be final and binding on the Contractor. No claim, whatsoever, of any kind shall be entertained from the Contractor on this account. Nothing extra shall be payable on this account. Also, the material shall be procured only after written approval of the Superintending Engineer (Estate Office).
- (vii) All materials for construction / incorporation shall be got checked by the Engineer-In-Charge or his authorized personnel on receipt of the same at site before use.

- (viii) The Contractor or his authorized representative shall associate in collection, preparation, forwarding and testing of such samples. In case he or his authorized representative is not present or does not associate him, the result of such tests and consequences thereon shall be binding on the Contractor. The Contractor or his authorized representative shall remain in contact with the Engineer-in-Charge or his authorized representative associated for all such operations. No claim of payment or claim of any other kind, whatsoever, shall be entertained from the Contractor.
- (ix) All expenditure to be incurred for testing of samples like packaging, sealing, transportation, loading, unloading, necessary personnel assistance in the process etc. including testing charges shall be borne by the Contractor.
- (x) All the hidden items such as water supply lines, drainage pipes, conduits, sewers etc. are to be properly tested as per the design conditions before covering.
- (xi) Water tanks, taps, sanitary, water supply and drainage pipes, fittings and accessories should conform to byelaws and municipal body / corporation where CPWD Specifications are not available. The Contractor should engage licensed plumbers for the work and get the materials (fixtures/fittings) tested by the Municipal Body/Corporation authorities wherever required at his own cost.

6.3.14 Program Chart:

- (i) The Contractor shall prepare an integrated program chart within fifteen days of issue of award letter including civil as well as E & M activities for the execution of work, showing clearly all activities from the start of work to completion, with details of manpower, equipment and machinery required for the fulfilment of the program within the stipulated period and submit the same for approval of the Superintending Engineer (Estate Office) These shall be submitted by the Contractor through electronic media besides forwarding hard copies of the same. The integrated program chart so submitted should not have any discrepancy with the physical milestones attached in the Contract agreement. The program chart should include the following: -
- (ii) Descriptive note explaining sequence of various activities.
- (iii) The Contractor shall prepare a Construction Program using PRIMAVERA Software, with complete resource and financial loading, including manpower and specialized equipment for every key stage of the project. The Contractor shall also integrate the schedule with the BIM model to ensure seamless tracking of progress, resource utilization, and cost management throughout the project lifecycle.
- (iv) The BIM Model in LOD 350 shall be provided by the Architect, and the responsibility of upgrading the model to LOD 400 and subsequently to LOD 500 shall lie with the Contractor. The Contractor shall ensure the model's accuracy and completeness at each stage to support construction activities, resource management, Program for procurement of materials by the Contractor and project handover.
- (v) Program for arranging and deployment of manpower both skilled and unskilled so as to achieve targeted progress.
- (vi) Program of procurement of machinery/equipment having adequate capacity, commensurate with the quantum of work to be done within the stipulated period, by the Contractor.
- (vii) In case of noncompliance/delay in compliance in this, a penalty @ Rs. 500/- per day will be imposed which will be recovered from the immediate next R/A Bill of the Contractor.
- (viii) If at any time, it appears to the Superintending Engineer (Estate Office) that the actual progress of work does not conform to the approved program referred above, the Contractor shall produce a revised program showing the modifications to the approved program by additional inputs to ensure completion of the work within the stipulated time.

- (ix) The submission for approval by the Superintending Engineer (Estate Office) of such program or the furnishing of such particulars shall not relieve the Contractor of any of his duties or responsibilities under the Contract. This is without prejudice to the right of Engineer- In-Charge to take action against the Contractor as per terms and conditions of the agreement.
- (x) Apart from the above integrated program chart, the Contractor shall be required to submit fortnightly progress report of the work in a computerized form on 1st and 16th of every month. The progress report shall contain the following, apart from whatever else may be required as specified above:
 - a. Construction schedule of the various components of the work through a bar chart for the next two fortnights (or as may be specified), showing the micro- milestone/milestones, targeted tasks (including material and labour requirement) and up to date progress. At least

10 digital photographs showing all the parts of construction site along with at least 5 minutes video of executions of different items in soft copy has to be submitted in every fortnightly progress report.
 - b. Progress chart of the various components of the work that are planned and achieved, for the fortnight as well as cumulative up to the fortnight under reckoning, with reason for deviations, if any in a tabular format.
 - c. Plant and machinery statement, indicating those deployed in the work.
- (xi) In case of non-compliance / delay in compliance in submission of fortnightly, a penalty @ Rs. 1000/- per fortnightly report will be imposed which will be recovered from the immediate next R/A Bill of the Contractor.
- (xii) IITB shall in no way be responsible for either any delay in getting electric and/or water and/or telephone connections for carrying out the work or not getting connections at all. No claim of delay or any other kind, whatsoever, on this account shall be entertained from the Contractor. Also, contingency arrangement of stand-by water & electric supply shall be made by the Contractor for commencement and smooth progress of the work so that work does not suffer on account of power failure or disconnection or not getting connection at all. No claim of any kind whatsoever shall be entertained on this account from the Contractor. Nothing extra shall be payable on this account.

6.3.15 Cleanliness of the Site:

- (i) The Contractor shall not stack building material / malba/muck on the land or road of the institute or on the land owned by the others, as the case may be. So, the muck, rubbish etc. shall be removed periodically as directed by the Superintending Engineer (Estate Office), from the site of work to the approved dumping grounds as per the local bye laws and regulations of the concerned authorities and all necessary permissions in this regard from the local bodies shall be obtained by the Contractor. Nothing extra shall be payable on this account. In case, the Contractor is found stacking the building material / malba as stated above, the Contractor shall be liable to pay the stacking charges/penalty as may be levied by the local body or any other authority and also to face penal action as per the rules, regulations and bye-laws of such body or authority. The Engineer –in-Charge shall be at liberty to recover, such sums due but not paid to the concerned authorities on the above accounts, from any sums due to the Contractor including amount of the Security Deposit and performance guarantee in respect of this Contract agreement.
- (ii) The Contractor shall take instructions from the Superintending Engineer (Estate Office) regarding collection and stacking of materials at any place. No excavated earth or building rubbish shall be stacked on areas where other buildings, roads, services and compound walls are to be constructed.

- (iii) The Contractor shall take all care to prevent any water- logging at site. The waste water, slush etc. shall not be allowed to be collected at site. For discharge into public drainage system, necessary permission shall be obtained from relevant authorities after paying the necessary charges, if any, directly to the authorities. The work shall be carried out in such a way that the area is kept clean and tidy. All the fees/charges in this regard shall be borne by the Contractor. Nothing extra shall be payable on this account.

6.3.16 Inspection of Work:

Officers of IIT Bombay or authorized personnel of IITB shall be inspecting the on-going work at site at any time with or without prior intimation. The Contractor shall, therefore, keep updated the following requirements and detailing.

- (i) Display Board showing detail of work, weekly progress achieved with respect to targets, reason of shortfall, status of manpower, wages being paid for different categories of workers.
- (ii) Entrance and area surrounding to be kept cleaned.
- (iii) Display layout plan key plan, building drawings including plans, elevations and sections.
- (iv) Up to date displays of Bar chart, CPM and PERT etc.
- (v) Keep details of quantities executed, balance quantities, deviations, possible Extra item, substituted Item etc.
- (vi) Keep plastic / cloth mounted one sets of building drawings.
- (vii) Set of Helmets and safety shoes for exclusive use for officers/dignitaries visiting at site.

6.3.17 Final Testing of the Installation:

The Contractor shall demonstrate trouble free functioning of all the Civil, Mechanical, Electrical, Plumbing (MEP) installations and services. The Superintending Engineer (Estate Office) or his authorized representatives shall carry out final inspection of the various Civil and MEP services and installations. Any defect(s) noticed during demonstration shall be rectified by the Contractor at his own cost to the entire satisfaction of the Superintending Engineer (Estate Office). Nothing extra shall be payable on this account.

6.3.18 Defect Liability Period (Refund of Security Deposit):

The clause 17 of the General Conditions of the Contract shall be applied. The defect liability / maintenance period shall start after the date of issue of completion certificate. Besides observing other formalities prescribed in the General Conditions of the Contract, for release of security deposit, the Contractor shall have to produce a certificate stating that no defects are pending for rectification from the Superintending Engineer (Estate Office), IIT Bombay or any other authorized representative of the IIT Bombay.

6.3.19 Unit Rates:

- (i) Wherever any reference to any Indian Standards occurs in the documents relating to this Contract, the same shall be inclusive of all amendments issued thereto or revisions thereof, if any, up to the date of receipt of tenders.
- (ii) Unless otherwise specified in the schedule of quantities, the rates for all items of work shall be considered, as inclusive of pumping out or bailing out water, if required throughout the construction period for which no extra payment shall be made. This shall also include water encountered from any sources such as rains, floods, sub soil water table being high and/or due to any other cause whatsoever.
- (iii) The rates for all items of work, shall unless clearly specified otherwise, include cost of all operations and all inputs of labour, material, T & P, wastages, transportation, scaffolding at all locations, levels and heights, wastages, watch and ward, other inputs,

all incidental charges, all taxes, cess, VAT, duties, levies etc. required for execution of the work.

- (iv) Unless otherwise provided in the Schedule of Quantities, the unit rates for the various items are inclusive of carrying out the works at and / or up to all heights, lifts, leads and depths.
- (v) Unless otherwise specified in the Schedule of Quantities, the unit rates for the various items shall be inclusive of carrying out the work in curvilinear portions of the building in plan and elevation as per the architectural drawings. Nothing extra shall be payable on this account.
- (vi) Waterproofing and Anti-termite Treatment items of work shall be carried out by specialized Agencies and shall carry 10 years warranty which shall commence from Project completion date.
- (vii) All warranty obligations as per the Contract are deemed included in the unit rates. Warranty shall be provided in the standard formats incorporated in the Tender and mutually agreed format if not incorporated in the Tender.

6.3.20 Insurance Policies:

- (i) Before commencing the execution of work, the Contractor shall, without in any way limiting his obligations and liabilities, insure at his own cost and expense against any damage or loss or injury, which may be caused to any person or property, at site of work. The Contractor shall obtain and submit to the Superintending Engineer (Estate Office) proper Contractor All Risk Insurance Policy for an amount 1.25 times the Contract amount for this work, with Superintending Engineer (Estate Office) as the first beneficiary. The insurance shall be obtained in joint names of Superintending Engineer (Estate Office) and the Contractor (who shall be second beneficiary). Also, he shall indemnify the IITB from any liability during the execution of the work. Further, he shall obtain and submit to the Superintending Engineer (Estate Office), a third-party insurance policy for maximum Rs.10 lakh for each accident, with the Superintending Engineer (Estate Office) as the first beneficiary. The insurance shall be obtained in joint names of Superintending Engineer (Estate Office) and the Contractor (who shall be second beneficiary).
- (ii) The Contractor shall, from time to time, provide documentary evidence as regards payment of premium for all the Insurance Policies for keeping them valid till the completion of the work. The Contractor shall ensure that Insurance Policies are also taken for the workers of his Sub-Contractors / specialized agencies also. Without prejudice to any of its obligations and responsibilities specified above, the Contractor shall within 10 days from the date of letter of acceptance of the tender and thereafter at the end of each quarter submit a report to the IITB giving details of the Insurance Policies along with Certificate of these insurance policies being valid, along with documentary evidences as required by the Superintending Engineer (Estate Office). No work shall be commenced by the Contractor unless he obtains the Insurance Policies as mentioned above. Also, no payment shall be made to the Contractor on expiry of insurance policies unless renewed by the Contractor. Nothing extra shall be payable on this account. No claim of hindrance (or any other claim) shall be entertained from the Contractor on these accounts.

6.3.21 Facilities for IITB:

- (i) The Contractor shall provide, construct and maintain at all times during execution and till completion of the work, a temporary site office with adequate electrical light fittings, A.C., fans, electric/ power points, switches etc. at his cost for exclusive use of the Superintending Engineer (Estate Office) and his authorized representatives, Program Management Consultants and Architects. Area of such office shall be approximately 160 sqm and shall have required partitions, doors, windows, locking arrangement etc. with a conference hall for 20 persons with conference table, chairs etc. all as per

direction of Superintending Engineer (Estate Office). Adequate toilet facilities connected to a temporary septic tank /soak pit, drinking water with water purifier & cooler etc. shall also be provided in the site office. All the water and electricity charges for the site office shall be borne by the Contractor. The Contractor shall provide one licenced software PRIMAVERA to IITB.

- (ii) The Contractor shall at all reasonable times provide access to the Superintending Engineer (Estate Office) or his authorized representative to the workshops, factories or other places where materials are stored, for inspection and/or collection of samples. Nothing extra shall be payable on this account.

6.3.22 Preparation of Mock ups and Sample Units:

The Contractor shall prepare & display mock-ups in actual position of each and every item and obtain approval of **Superintending Engineer** before execution in masse. The mock up shall be preserved for the purpose of reference till completion of the item represented by the mock up. Similarly, the Contractor shall prepare two sample toilet blocks comprising of all finishes and fittings included in the scope of this Contract. Approval of Superintending Engineer (Estate Office) shall be obtained before taking up finishing works en masse. The work executed in approved mock ups / sample units in actual position forming part of the main work shall be measured and paid to the Contractor under the respective items of the Contract. However, any mock-up/sample not approved shall not be measured and paid. Also, the Contractor shall have to dismantle and remove the same from the site of work at his cost. However, those mock-up/ samples not prepared in actual position and not forming the part of main work shall not be paid.

6.3.23 Standard operating procedure:

1. The Contractor shall exceed the Requirements of "During Construction Indoor Air Quality Management Guidelines" from National Building Code (NBC) of India, Part 7 – Constructional Practices and Safety. These include but are not restricted to the following:
 - a. All construction activities shall be sequenced and well-coordinated to minimize disruption of occupied areas.
 - b. Adequate protection shall be done for on-site and installed absorptive materials from moisture damage. No installation of moisture damaged products shall be done unless properly dried.
 - c. All equipment prone to damage due to dust and/or humidity shall be protected during construction. Similarly, all openings of ducts and equipment shall be properly sealed, preferably with plastic material.
 - d. Implementation of proper housekeeping practices on site to ensure a clean job site to control potential contaminants such as dirt, dust and debris.
 - e. Avoid usage of finishing materials with High VOC or formaldehyde levels.
 - f. Proper isolation and ventilation shall be carried out while using toxic materials.
 - g. All these activities shall be documented with photographs periodically (at least 18 photographs) on site.
10. A periodic photographic record shall be maintained from the start of construction up to completion.
11. The Contractor shall develop a spill management plan for management of any diesel / oil spills on site including HSD used for DG sets during construction.

6.3.24 Air pollution Mitigation:

1. The following air pollution mitigation measures provided by Brihan Mumbai Municipal Corporation (BMC) as guide lines. The Contractor shall strictly adhere to these guide lines as below and as issued time to time by BMC as part of his contractual obligation under this Contract. Tendered Amount deemed to be inclusive of expenditure on this account and nothing extra shall be paid for these compliances.
 - (i) All the buildings under construction shall be compulsorily enclosed by green cloth / jute sheet / tarpaulin from all sides.
 - (ii) All the structures under demolition shall be covered with tarpaulin / green cloth / jute sheet from top to bottom. There shall be continuous sprinkling / spraying of water during the process of demolishing of the structure.
 - (iii) It shall be ensured that water fogging shall be carried out during loading and unloading of materials at the construction sites (use of stationary/ mobile anti- smog guns).
 - (iv) The water sprinkling shall be done on debris / earth material etc. which are prone to generate air borne particulate matters at all construction sites without fail.
 - (v) All vehicles carrying construction materials shall be fully covered (i.e. from top and all sides) so that construction material or debris does not become airborne during transportation and the vehicle shall not be overloaded to avoid any spillage from the vehicle.
 - (vi) All construction sites shall install CCTV cameras along the periphery of their work sites to ensure that vehicles are plying after cleaning tyres and are not overloaded
 - (vii) All construction sites to deploy sensor-based air pollution monitors at work sites and act immediately on observing pollution levels exceeding the limit. This monitoring shall be made available for inspection to BMC authorities as and when demanded.
 - (viii) All the work sites shall ensure that the grinding, cutting, drilling, sawing and trimming work is carried out in enclosed area and water sprinkler / water fogging is continuously done while working to avoid escape of fugitive air. The timeline for procurement of sprinklers shall be 15 days and for procurement of smog guns shall be 30 days from the issuance of the Work Order.
 - (ix) All the construction sites shall ensure that C & D (Construction and Demolition) waste generated within the premises / site of work is transported to designated unloading site strictly as per BMC's C & D Waste Management Plan. After unloading the debris, the vehicle shall be washed and cleaned thoroughly. The vehicles carrying construction material or C & D material, if found not adhering to above stated provisions, shall be seized and impounded by BMC.
 - (x) All vehicles carrying materials shall have valid PUC certificates and the same shall be produced as and when asked for by competent authorities.
 - (xi) Contractor shall engage only those vehicles which possess vehicles tracking system installed on them.
 - (xii) The loose soil, sand, construction materials and debris of any kind and quantity shall be stored in demarcated / dedicated area and properly barricaded, fully covered / enclosed / protected with tarpaulins. It shall be ensured that there is no dumping of construction material and debris on public roads, footpaths, pavements and open area.
 - (xiii) Vehicle tyre washing facility shall be provided at all exit points of construction sites. It shall be ensured that daily cleaning is carried out for removal of dust by using vacuum sweeping or water sprinkling, brushing, blooming and sweeping.
 - (xiv) All the construction personnel / managers shall mandatorily wear personal protective equipment such as masks, goggles, helmets, etc.

- (xv) All the project proponents to ensure that at least 35 feet high tin / metal sheets shall be erected around the periphery of construction projects having height more than 70 mtr.
- (xvi) The construction site shall have barricading of tin / metal sheet erected around periphery with mandated heights as per the MCGM requirements.
- (xvii) Provision of barricading and noise control measures as per the article 19 and article 20 respectively of Special Conditions of the Contract shall be strictly followed.

6.4 **SPECIAL CONDITIONS OF THE CONTRACT:**

(PERTAINING TO SITE FACILITIES AND RESTRICTIONS)

1. IIT Bombay is fully residential and fully operational campus. The bidders are advised to take utmost care while executing the works that minimum/ no disturbances happen to the users. The bidder shall also protect site of work from the unauthorized entry of any persons by erecting necessary barricading. Specifications for the barricading shall be as provided in the Special Conditions of the Contract.
2. IIT Bombay campus is situated in densely populated locality of Mumbai with huge flow of traffic in the roads leading to IIT Bombay. The bidders shall fully understand restrictions before participating in the tender. Nothing extra shall be paid on this account. No delay or claims of any kind shall be entertained from the Contractor on this account.
3. Since the campus is fully residential, concrete plant / batch mix plant/ ready mix plant shall not be allowed inside the IIT campus. Nothing extra shall be paid on this account.
4. ~~Water for drinking purposes at labour camp, site offices and at construction site shall be the responsibility of the Contractor.~~
5. Clause 30 & 30A of GCC stands deleted. Water for construction purposes shall be provided by IITB at 1 point in VMCC building at each floor and 1% of civil works cost shall be deducted from all running bills towards the same. Further distribution at work site locations with proper piping, valves etc. shall be arranged by the Contractor. The Contractor shall maintain the water supply for his works such that no wastage or spillage of water in the building. Penalty of Rs.10,000/- per incidence shall be levied if not followed.
6. **Electricity connection shall be provided by IIT at one point near the site. The Contractor shall make is own arrangement for tapping at multiple locations and distribution network for which nothing extra shall be paid. Consumption charges as per MSEDCL TII Commercial tariffs. The current rates are at Rs 14.11 per unit and Rs.640.00 fixed monthly charges or as per prevailing rate from time to time shall be payable to IITB by the Contractor.** Before tendering, he shall visit the site and assess the manner in which he is able to arrange the above facilities. The Superintending Engineer (Estate Office) shall in no way be responsible for any delay on this account and no claim, whatsoever, on this account shall be entertained. The Contractor shall be required to pay electricity charges at regular interval as desired by IITB. RA bill/ Final bill shall be paid only after proof of up-to-date payment of electricity charges submitted to the Engineer-in-Charge.
7. The Contractor shall abide by the rules /bye laws applicable in respect of water z/electricity connection and he shall be solely responsible for any penalty on account of violation of any of the rules / bye laws in this regard. The Contractor shall indemnify the IITB against any claim arising out of pilferage, theft, damage, penalty, non-settlement of bills etc. whatsoever on this account.
8. Space for site office, site storage yard and worker restrooms (including toilets) shall be provided in the vicinity of site free of ground rent. The agency shall be required to establish all such facilities and for which nothing extra shall be paid. It shall be responsibility of agency to transport the material from material stacking yard to site and for which nothing extra shall be paid. In case any building or infrastructure work is required to be executed on the land occupied by the site office/site store/workers rest room/ labour camp, agency shall relocate these shelters for which nothing extra shall be paid.

9. **Site office facilities for IITB and / or the representatives appointed by IITB (PMC and Architect, Consultants) shall be provided by the Contractor at free of cost on the free issued land / plot by IITB in the vicinity of the Site / Work as elaborated in the Special Conditions of the Contract.**
10. Contractor shall make temporary access / approach roads to the work site / storage areas etc. to suite with the movement and loads of the transport vehicles including smooth movements during monsoon period at free of cost and deemed included in the Tendered price.
11. ~~The Contractor or has to provide creche facility for the children of labour deployed in the work. The Contractor also has the option of sending children of labour to the creche facility run by IITB. To avail the facility of IITB run creche facility, the Contractor shall be required to pay @Rs.18,000/- per month to IITB for contribution towards running of the creche facility for the full or part month during which such facility was availed. The Contractor shall be required to pay contribution at regular interval, as desired by IITB. However, IITB has no liability to run the creche facility in case of any unforeseen circumstances.~~
12. Public Health Officer of IITB shall be authorized to check the cleanliness and hygienic of the site & labour accommodation units and suggestion given by him will be binding on the Contractor for which nothing extra shall be paid.
13. The Contractor shall be required to strictly follow security norms and procedure in terms of entry/exit passes to all the vehicles/ persons/ materials, issue/ reissue/ surrender of labour passes and other rules and regulations that will be brought in force from time to time by IITB. Any penalty imposed by IIT Bombay for violating security norms will be immediately paid by the Contractor for which nothing extra shall be paid.
14. All pre-fabrication works wherever possible shall be carried outside the IITB premises and only assembling and finishing portion of the work shall be at the site of work.
15. Trees existing in the vicinity of construction area need to be preserved throughout the time till final handing over of the building to IITB. The agency shall take every measure for protection of such trees and nothing extra shall be paid on this account.
16. ~~Space of about 500 Sq. M designated place for labour accommodation shall be provided within the campus. Whole area of labour accommodation shall be cordoned off by erecting GI Sheet of height 3.5 metre for which nothing extra shall be paid. The Bidder Shall be required to construct labour accommodation neatly with proper sanitation including soak pit etc. The bidder shall follow security regulations issued by IITB from Time to time. Nothing extra shall be paid on this account. Bidder shall be required to pay at Rs.40 / month (Including applicable GST) per Sq. M or part thereof to IITB toward licence fee for the area being used for labour hutment. After completion of work area shall be handed over in original condition.~~
17. ~~Contractor shall be responsible to establish the Closed Circuit Television (CCTV) Surveillance system for the entire construction Site throughout the Construction activity right from the taking over the Site and till handed over the Building and Facility to IITB.~~
18. ~~CCTV Surveillance system of HD quality shall be included with the necessary hardware, software, networking cables, switches, signal boosters etc. for construction site shall cater minimum requirements but not limited to the following:-~~
 - ~~Real time viewing, watching progress as it unfolds~~
 - ~~Record of constant traffic all day long and during the night~~

- ~~keeping track of all the construction and other activities that occur at the site on day to day basis-~~
- ~~Archiving, all major project milestones saved and logged-~~
- ~~Embeddable video (java script), to view any of the site related feeds on the website~~
- ~~CCTV camera shall act as deterrent against crime and vandalism at site-~~
- ~~CCTV cameras shall be able to provide a virtual experience of going around the entire site to determine the progress of work and current worker's activities at site-~~
- ~~Tim lapse video of the construction progress from commencement to till date of the request-~~

~~The cost towards CCTV Surveillance system establishment and removal after completing the project is deemed included in the Tendered Amount and shall not be paid separately.~~

19. Barricading for the working areas, labour hutments and Contractor's site setup

i. Preamble

All the working areas shall be provided with opaque barricade of minimum height as per the guidelines issued by BMC regarding "Air Pollution Mitigation" vide Circular u/No. MCG/F/1102 dated 25.10.2023 and any other revisions or circulars on the subject issued time to time during construction period of the Project. The Contractor shall be familiarized himself with the extent of site and its surroundings for assessing the requirement of barricading. The barricading shall be designed to suite with the site conditions and the required height of barricading as per the guidelines and shall be retained and maintained during the entire duration of the construction work and shall be removed only after approval of the Engineer in Charge.

ii. Extent of Barricading

The construction area to be covered shall include the footprint of the building or facility under construction, the area of external development including fire safety road if specified. Barricading shall be provided giving a setback of at least 3.00 M around the construction area to the extent possible.

The working space required for construction activities such as contractor's office space, material storage area, circulation space for construction vehicles, bar bending yard, space required for temporary stacking of excavated earth during construction, and all construction site installations shall be properly barricaded.

~~Labour hutment area if provided shall have a barricading to the required height as per MCGM /labour laws etc. but not less than 3.0 mtrs.-~~

iii. Design and Details of Barricading

The Barricading of required height as mandated by MCGM time to time shall be by using pre painted tin / metal sheets of suitable gauge which shall be governed by the design and engineering without any gaps / spaces with designed structural arrangement including foundations to suite with the site conditions. Contractor shall obtain the approval from Engineer-In-Charge with respect to the Barricading specification, structural design drawing and aesthetic visibility. Contractor shall maintain the Barricading in its original condition till completion of the Project. Rust free Barricading throughout the duration of the Contract is responsibility of the Contractor.

iv. Cost of the Barricading

The entire cost of providing, installing, maintaining the Barricading rust free and aesthetic way till completion of the Project and removing the barricading including its foundations and making the ground to its original condition shall be obligation of the Contractor under the Contract and cost towards the same shall be included in the Tendered Amount. No separate payment shall be made for the same.

20. Noise Control Measures

The contractor shall ensure that the specifications regarding restrictions on noise levels are scrupulously adhered to.

i. Noise Level within the Barricaded Area

Noise level during the day time – The contractor shall ensure that the activities that generate noise are allowed generally during 0900 hours to 1800 Hours of the day. Contractor may seek Engineer-In-Charge approval for any such work for extended hours but only up to 2200 Hrs. Engineer-In-Charge shall approve the same after examining on case by case the requirement and necessitated duration and Contractor shall not have recourse on the same.

General sound level shall be maintained maximum up to 65 dB.

Sound level at from 1800 Hour till 2200 Hours shall be maximum 45 dB.

All noise making activities in the construction area within the building under construction shall be properly walled and sound absorbing muffler arrangements shall be made.

While carrying the noise causing activities, Contractor shall observe Noise Pollution (Regulation & Control) Rules 2000 and the provisions of notification issued by Ministry of Environment & Forest Department from time to time shall be observed.

ii. Noise Level outside the Barricaded Area:

It is the responsibility of the contractor to ensure that the noise does not spread beyond the barricaded area. The sound level shall not be allowed to exceed 45 dB level outside the barricade.

iii. Cost for controlling the Noise Levels

Controlling the Noise pollution shall be obligation of the Contractor under the Contract and cost towards the same shall be included in the Tendered Amount. No separate payment shall be made for the same.

21. ~~Earth / all types of soil retaining measures during the construction of basement / foundations and protection of existing trees and structures nearby:-~~

~~The following shall be referred prior to taking up the excavations for Basement and foundations:-~~

- ~~1. Geotechnical Investigation Report~~
- ~~2. Topographic Survey / contour plan of the entire plot~~
- ~~3. Foundation and excavation drawings~~
- ~~4. Layout plan with location of trees~~

~~Before taking up the excavation for basement and foundations, Contractor shall thoroughly study the above plans and documents and shall make an excavation scheme and measures for all weather protection of the side slopes. While designing~~

~~the scheme, care shall be taken for the protection of the adjacent trees which are not in the list of transplantation / cutting.~~

~~Following are the responsibilities of the Contractor as part of the obligation towards the Contract during the construction of basement and foundations and till completion of the Project:~~

- ~~i. Protecting the trees and adjacent existing structures including roads and drains is the sole responsibility of the Contractor during the execution period and up to the Defects liability period.~~
- ~~ii. Contractor shall make adequate provisions for safe guarding the trees that have to be retained during the basement and foundations construction and till completion of the project. The legal and financial liability of the same shall be attributable to the Contractor.~~
- ~~iii. All the existing roads and drains need to remain functional till completion of the project.~~
- ~~iv. The levels for foundations as well as the raft to be achieved as per structural designs, drawings and as per the instructions based on the ground realities.~~
- ~~v. The site shall remain free of stagnant water during the working. Adequate provisions of drainage/ de-watering shall be made by the Contractor.~~
- ~~vi. The Contractor at their own cost shall design and execute soil retention methods with the prior approval.~~

~~The Contractor proposed method of retaining of the surroundings shall be furnished by the Contractor well in advance with supporting design details for review and approval. In case, submitted proposal is not acceptable to the IITB, Contractor shall make an alternative proposal with satisfied technical support and design data without having any claim towards cost and time. The Contractor shall adopt the method / scheme only after obtaining written approval from the Engineer-In-Charge (EIC).~~

Other measures of protection included but not limited to providing adequate tree support, propping, tree guard, coordinating with IITB horticulturist through Engineer-In-Charge establishing and executing proper care and protection of the trees. Any deviation resulting in the felling and / or non-survival of the trees shall make the Contractor solely liable for such event and all issues arising from the event namely financial, legal, statutory, construction, etc. in nature without any cost and time liability to IITB. The Contractor shall indemnify and hold harmless the IITB from any claims, demands, cause of actions, loss, expenses or liability on account of such event, injury or death of Contractors personnel and IITB representatives (PMC / Architects and their Consultants) and any other personnel involved for the Project at site of work.

The cost involved in the designing and protection of the sides by suitable methods will not be part of the BOQ items of work. Cost towards the above deemed included in the Tendered Amount and shall not be measured or accounted for any separate payment.

22. The contractor shall, within **seven (7) days** from the date of issue of Letter of Acceptance or before commencement of work (whichever is earlier), submit a detailed **Methodology Statement** for all major civil items of work such as excavation, concreting, reinforcement, formwork, masonry, plastering, flooring, waterproofing, etc.
23. The methodology shall clearly indicate the sequence of operations, machinery to be deployed, manpower planning, quality assurance measures, safety provisions, and arrangements for curing, protection, and housekeeping during execution.
24. The submitted methodology shall be reviewed by the Engineer-in-Charge or his authorized representative. The contractor shall commence the work only after obtaining **written approval** of the methodology from the Engineer-in-Charge.

25. In case the methodology is found unsuitable or requires modifications based on site conditions, the contractor shall revise and resubmit the same for approval without any additional cost or time implication. The approved methodology shall be strictly adhered to during execution, and any deviation shall be carried out only with the prior approval of the Engineer-in-Charge.
26. The contractor shall ensure that all **malba, debris, dismantled materials, and waste generated** during execution are **removed from the site within 24 hours** of their generation. No accumulation of debris or construction waste shall be permitted at site at any time.
27. The work is to be carried out in an area with ongoing institute/office activities and traffic movement. The contractor shall maintain the site and adjoining areas in a **neat, clean, and obstruction-free condition** throughout the execution period.
28. The debris shall be **transported and disposed of only at approved locations** (outside IITB campus) identified by the Engineer-in-Charge or local authorities, following all statutory and environmental norms. Proof of disposal, such as challans or photographs, shall be submitted along with running bills.
29. In case of failure to remove debris within the stipulated period of 24 hours, the same shall be removed by the Department at the **risk and cost of the contractor**, and suitable recovery shall be made from the contractor's dues. Repeated non-compliance may attract penalties or suspension of work as decided by the Engineer-in-Charge.
30. During removal and transportation, the contractor shall ensure **no damage or nuisance** is caused to existing structures, services, or traffic movement. Necessary safety precautions, including covering of vehicles and dust control measures, shall be strictly followed.
31. The contractor shall, within **seven (7) days** from the date of issue of the Letter of Acceptance or before commencement of work (whichever is earlier), submit the following documents to the **Engineer-in-Charge** for review and approval, as stipulated in the Notice Inviting Tender (NIT):
 1. **Quality Assurance Manual (QAM)**
 2. **Quality Assurance and Quality Control (QA/QC) Plan**
 3. **Project Organisation Chart** indicating key technical and supervisory staff along with their responsibilities and contact details
 4. **Detailed Work Programme / Bar Chart / CPM Schedule** showing timelines for major activities and milestones
 5. **Material Procurement Plan and Equipment Deployment Schedule**
 6. **Safety and Environmental Management Plan**
32. The contractor shall update the **Bar Chart / CPM Schedule** on a **monthly basis** (or as directed by the Engineer-in-Charge) to reflect actual progress and revised targets. Updated documents shall be submitted for review along with monthly progress reports.
33. The contractor shall maintain all quality records, test reports, and site documentation as per the approved QA/QC plan. Non-compliance with approved procedures or

failure to maintain quality documentation may result in suspension of work or withholding of payments, as deemed appropriate by the Engineer-in-Charge.

34. The contractor shall provide and maintain at his own cost a **fully functional site office** at the work site (or at a location approved by the Engineer-in-Charge) for use by the **Client / Project Management Consultant (PMC) / Engineer-in-Charge** and his staff during the entire period of the contract.
35. The site office shall be properly constructed, furnished, and equipped with the following minimum facilities:
 1. Work tables, chairs, and storage cabinets
 2. Adequate lighting, ventilation, and power supply
 3. Drinking water and sanitation facilities
 4. Internet connection and communication arrangements
 5. Display boards for drawings, bar charts, and site instructions
 6. Arrangement for keeping and reviewing site records and test reports

The area, layout, and furnishing details shall be got approved from the Engineer-in-Charge before setup.

36. The contractor shall maintain the site office in a clean, safe, and usable condition throughout the duration of the project. Any repair or replacement required shall be attended to immediately at the contractor's cost.
37. The site office shall be made ready and handed over for use by the Client/PMC **within 15 (fifteen) days** from the date of commencement of work at site or as directed by the Engineer-in-Charge.
38. On completion of the work, the site office along with all furniture and fixtures shall be handed over to the department or dismantled and cleared from site as instructed by the Engineer-in-Charge, at no extra cost to the IITB.
39. The contractor shall prepare and finalize detailed working/shop drawings, based on the tender drawings, specifications, and site conditions, within **15 days** (or as directed) from the date of issue of Letter of Acceptance.
40. The contractor shall submit these drawings for review and approval to the **Client/PMC/Architect** before commencement of the related works at site.
41. The drawings shall include all necessary details, levels, sections, dimensions, and coordination with services and structural works to ensure proper execution.
42. The contractor shall incorporate all comments and modifications suggested by the Client/PMC/Architect and resubmit the revised drawings for final approval.
43. No work shall commence at site based on unapproved drawings. Any work executed without approved drawings shall be at the risk and cost of the contractor, and such work is liable for rejection.
44. The approved drawings shall form part of the contract and shall be binding on the contractor for execution.

- 45. The contractor shall plan, schedule, and execute the work strictly in accordance with the availability of work fronts as per the User's schedule provided by the Client/PMC/Architect from time to time.**
46. The sequence and availability of work fronts shall depend on the functional requirements and occupancy of the premises, and the contractor shall have no claim whatsoever on account of non-availability, partial availability, or delayed handing over of any portion of the site.
47. The contractor shall coordinate his work execution program with the Client/PMC/Architect and the User Department to ensure smooth progress of work without causing any disturbance to ongoing activities in adjacent or occupied areas.
48. No idle charges or compensation shall be payable to the contractor due to staggered or restricted release of work fronts.
49. The contractor shall suitably deploy additional manpower, equipment, and resources as and when required to meet the project timelines in line with the User's schedule.

7. SAFETY CODE

1. Suitable MS steel scaffolds should be provided for workmen for all works that cannot safely be done from the ground, or from solid construction except such short period work as can be done safely from ladders. When a ladder issued, an extra mazdoor shall be engaged for holding the ladder and if the ladder is used for carrying materials as well suitable footholds and handhold shall be provided on the ladder and the ladder shall be given an inclination not steeper than $\frac{1}{4}$ to 1 ($\frac{1}{4}$ horizontal and 1 vertical). **Bamboo scaffolding is not allowed in IITB premises.**
2. Scaffolding of staging more than 3.6 m (12 ft.) above the ground or floor, swung or suspended from an overhead support or erected with stationary support shall have a guard rail properly attached or bolted, braced and otherwise secured at least 90 cm. (3 ft.) high above the floor or platform of such scaffolding or staging and extending along the entire length of the outside and ends thereof with only such opening as may be necessary for the delivery of materials. Such scaffolding or staging shall be so fastened as to prevent it from swaying from the building or structure.
3. Working platforms, gangways and stairways should be so constructed that they should not sag unduly or unequally, and if the height of the platform or the gangway or the stairway is more than 3.6m(12ft.) above ground level or floor level they should be closely boarded, should have adequate width and should be suitably fastened as described in (2) above.
4. Every opening in the floor of a building or in a working platform shall be provided with suitable means to prevent the fall of person or materials by providing suitable fencing or railing whose minimum height shall be 90 cm.(3ft.)
5. Safe means of access shall be provided to all working platforms and other working places. Every ladder shall be securely fixed. No portable single ladders shall be over 9 m. (30 ft.) in length while the width between side rails in rung ladder shall in no case be less than 29 cm. (11½”) for ladder up to and including 3 m. (10 ft.) in length. For longer ladders, this width should be increased at least $\frac{1}{4}$ ” for each additional 30 cm. (1 foot) of length. Uniform step spacing of not more than 30 cm shall be kept. Adequate precautions shall be taken to prevent danger from electrical equipment. No materials on any of the sites or work shall be so stacked or placed as to cause danger or inconvenience to any person or the public. The Contractor shall provide all necessary fencing and lights to protect the public from accident and shall be bound to bear the expenses of defence of every suit, action or other proceedings at law that may be brought by any person for injury sustained owing to neglect of the above precautions and to pay any damages and cost which may be awarded in any such suit; action or proceedings to any such person or which may, with the consent of the Contractor, be paid to compensate any claim by any such person.
6. Excavation and Trenching - All trenches 1.2 m. (4 ft.) or more in depth, shall at all times be supplied with at least one ladder for each 30 m. (100 ft.) in length or fraction thereof, Ladder shall extend from bottom of the trench to at least 90 cm. (3 ft.) above the surface of the ground. The side of the trenches which are 1.5 m. (5 ft.) or more in depth shall be stepped back to give suitable slope or securely held by timber bracing, so as to avoid the danger of sides collapsing. The excavated materials shall not be placed within 1.5 m. (5 ft.) of the edges of the trench or half of the depth of the trench whichever is more. Cutting shall be done from top to bottom. Under no circumstances, undermining or undercutting shall be done.
7. Safety Measures for digging bore holes: -
 - a. If the bore well is successful, it should be safely capped to avoid caving and collapse of the borewell. The failed and the abandoned ones should be completely refilled to avoid caving and collapse;

- b. During drilling, Sign boards should be erected near the site with the address of the drilling contractor and the Engineer in-charge of the work;
 - c. Suitable fencing should be erected around the well during the drilling and after the installation of the rig on the point of drilling, flags shall be put 50 m around the point of drilling to avoid entry of people;
 - d. After drilling the borewell, a cement platform (0.50 m x 0.50 m x 1.20 m) 0.60 m above ground level and 0.60 m below ground level should be constructed around the well casing;
 - e. After the completion of the borewell, the Contractor should cap the bore well properly by welding steel plate, cover the bore well with the drilled wet soil and fix thorny shrubs over the soil. This should be done even while repairing the pump;
 - f. After the borewell is drilled the entire site should be brought to the ground level.
8. All necessary personal safety equipment as considered adequate by the Engineer-in-Charge should be kept available for the use of the person employed on the site and maintained in a condition suitable for immediate use, and the contractors should take adequate steps to ensure proper use of equipment by those concerned. The following safety equipment shall invariably be provided.
- a. Workers employed on mixing asphaltic materials, cement and lime mortars shall be provided with protective footwear and protective goggles
 - b. Those engaged in white washing and mixing or stacking of cement bags or any material which is injurious to the eyes, shall be provided with protective goggles.
 - c. Those engaged in welding works shall be provided with welder's protective eye shields.
 - d. Stone breaker shall be provided with protective goggles and protective clothing and seated at sufficiently safe intervals.
 - e. When workers are employed in sewers and manholes, which are in active use, the contractors shall ensure that the manhole covers are opened and ventilated at least for an hour before the workers are allowed to get into the manholes, and the manholes so opened shall be cordoned off with suitable railing and provided with warning signals or boards to prevent accident to the public. In addition, the Contractor shall ensure that the following safety measure are adhered to :-
 - i. Entry for workers into the line shall not be allowed except under supervision of the JE or any other higher officer.
 - ii. At least 5 to 6 manholes upstream and downstream should be kept open for at least 2 to 3 hours before any man is allowed to enter into the manhole for working inside.
 - iii. Before entry, presence of Toxic gases should be tested by inserting wet lead acetate paper which changes colour in the presence of such gases and gives indication of their presence.
 - iv. Presence of Oxygen should be verified by lowering a detector lamp into the manhole. In case, no Oxygen is found inside the sewer line, workers should be sent only with Oxygen kit.
 - v. Safety belt with rope should be provided to the workers. While working inside the manholes, such rope should be handled by two men standing outside to enable him to be pulled out during emergency.

- vi. The area should be barricaded or cordoned off by suitable means to avoid mishaps of any kind. Proper warning signs should be displayed for the safety of the public whenever cleaning works are undertaken during night or day.
 - vii. No smoking or open flames shall be allowed near the blocked manhole being cleaned.
 - viii. The malba obtained on account of cleaning of blocked manholes and sewer lines should be immediately removed to avoid accidents on account of slippery nature of the malba.
 - ix. Workers should not be allowed to work inside the manhole continuously. He should be given rest intermittently. The Engineer-in-Charge shall decide the time up to which a worker may be allowed to work continuously inside the manhole.
 - x. Gas masks with Oxygen Cylinder should be kept at site for use in emergency.
 - xi. Air-blowers should be used for flow of fresh air through the manholes. Whenever called for, portable air blowers are recommended for ventilating the manholes. The Motors for these shall be vapour proof and of totally enclosed type. Non sparking gas engines also could be used but they should be placed at least 2 metres away from the opening and on the leeward side protected from wind so that they will not be a source of friction on any inflammable gas that might be present.
 - xii. The workers engaged for cleaning the manholes/sewers should be properly trained before allowing to work in the manhole.
 - xiii. The workers shall be provided with Gumboots or non-sparking shoes bump helmets and gloves non sparking tools safety lights and gas masks and portable air blowers (when necessary). They must be supplied with barrier cream for anointing the limbs before working inside the sewer lines.
 - xiv. Workmen descending a manhole shall try each ladder stop or rung carefully before putting his full weight on it to guard against insecure fastening due to corrosion of the rung fixed to manhole well.
 - xv. If a man has received a physical injury, he should be brought out of the sewer immediately and adequate medical aid should be provided to him.
 - xvi. The extent to which these precautions are to be taken depend on individual situation but the decision of the Engineer-in-Charge regarding the steps to be taken in this regard in an individual case will be final.
9. The Contractor shall not employ men and women below the age of 18 years on the work of painting with products containing lead in any form. Wherever men above the age of 18 are employed on the work of lead painting, the following precaution should be taken: -
- a. No paint containing lead or lead products shall be used except in the form of paste or readymade paint.
 - b. Suitable face masks should be supplied for use by the workers when paint is applied in the form of spray or a surface having lead paint is dry rubbed and scrapped.
 - c. Overalls shall be supplied by the contractors to the workmen and adequate facilities shall be provided to enable the working painters to wash during and on the cessation of work.
10. Workmen executing work on scaffolds or other structures above specified height shall be provided with full body harness and fall arresters.

11. An additional clause (viii)(i) of Central Public Works Department Safety Code (iv) the Contractor shall not employ women and men below the age of 18 on the work of painting with product containing lead in any form, wherever men above the age of 18 are employed on the work of lead painting, the following principles must be observed for such use:
 - (a) White lead, sulphate of lead or product containing this pigment, shall not be used in painting operation except in the form of pastes or paint ready for use.
 - (b) Measures shall be taken, wherever required in order to prevent danger arising from the application of a paint in the form of spray.
 - (c) Measures shall be taken, wherever practicable, to prevent danger arising out of from dust caused by dry rubbing down and scraping.
 - (d) Adequate facilities shall be provided to enable working painters to wash during and on cessation of work.
 - (e) Overall, shall be worn by working painters during the whole of working period.
 - (f) Suitable arrangement shall be made to prevent clothing put off during working hours being spoiled by painting materials.
 - (g) Cases of lead poisoning and suspected lead poisoning shall be notified and shall be subsequently verified by medical man appointed by competent authority of IITB (h)IITB may require, when necessary medical examination of workers.
 - (i)Instructions with regard to special hygienic precautions to be taken in the painting trade shall be distributed to working painters.
12. When the work is done near any place where there is risk of drowning, all necessary equipment's should be provided and kept ready for use and all necessary steps taken for prompt rescue of any person in danger and adequate provision, should be made for prompt first aid treatment of all injuries likely to be obtained during the course of the work.
13. Use of hoisting machines and tackle including their attachments, anchorage and supports shall conform to the following standards or conditions: -
 - (a) These shall be of good mechanical construction, sound materials and adequate strength and free from patent defects and shall be kept repaired and in good working order.
 - (b) Every rope used in hoisting or lowering materials or as a means of suspension shall be of durable quality and adequate strength, and free from patent defects.
 - (c) Every crane driver or hoisting appliance operator, shall be properly qualified and no person under the age of 21 years should be in charge of any hoisting machine including any scaffolding winch or give signals to operator.
 - (d) In case of every hoisting machine and of every chain ring hook, shackle swivel and pulley block used in hoisting or as means of suspension, the safe working load shall be ascertained by adequate means. Every hoisting machine and all gear referred to above shall be plainly marked with the safe working load. In case of a hoisting machine having a variable safe working load each safe working load and the condition under which it is applicable shall be clearly indicated. No part of any machine or any gear referred to above in this paragraph shall be loaded beyond the safe working load except for the purpose of testing.
 - (e) In case of departmental machines, the safe working load shall be notified by the Electrical Engineer-in- Charge. As regards Contractor's machines the contractors shall notify the safe working load of the machine to the Engineer-in-Charge whenever he brings any machinery to site of work and get it verified by the Electrical Engineer concerned.

14. Motors, gearing, transmission, electric wiring and other dangerous parts of hoisting appliances should be provided with efficient safeguards. Hoisting appliances should be provided with such means as will reduce to the minimum the risk of accidental descent of the load. Adequate precautions should be taken to reduce to the minimum the risk of any part of a suspended load becoming accidentally displaced. When workers are employed on electrical installations which are already energized, insulating mats, wearing apparel, such as gloves, sleeves and boots as may be necessary should be provided. The worker should not wear any rings, watches and carry keys or other materials which are good conductors of electricity.
15. All scaffolds, ladders and other safety devices mentioned or described herein shall be maintained in safe condition and no scaffold, ladder or equipment shall be altered or removed while it is in use. Adequate washing facilities should be provided at or near places of work.
16. These safety provisions should be brought to the notice of all concerned by display on a notice board at a prominent place at work spot. The person responsible for compliance of the safety code shall be named therein by the Contractor.
17. To ensure effective enforcement of the rules and regulations relating to safety precautions the arrangements made by the Contractor shall be open to inspection by the Labour Officer or Engineer-in-Charge of the department or their representatives.
18. Notwithstanding the above clauses from (1) to (15), there is nothing in these to exempt the Contractor from the operations of any other Act or Rule in force in the Republic of India.

8. MODEL RULES FOR THE PROTECTION OF HEALTH AND SANITARY ARRANGEMENTS FOR WORKERS EMPLOYED BY CONTRACTORS.

A. APPLICATION

These rules shall apply to all buildings and construction works in charge of Central Public Works Department/PWD (DA) in which twenty or more workers are ordinarily employed or are proposed to be employed in any day during the period during which the Contract work is in progress.

B. DEFINITION

Workplace means a place where twenty or more workers are ordinarily employed in connection with construction work on any day during the period during which the Contract work is in progress.

C. FIRST-AID FACILITIES

- (a) At every workplace, there shall be provided and maintained, so as to be easily accessible during working hours, first-aid boxes at the rate of not less than one box for 150 contract labour or part thereof ordinarily employed.
- (b) The first-aid box shall be distinctly marked with a red cross on white background and shall contain the following equipment: -
- (c) For work places in which the number of contract labour employed does not exceed 50- Each first-aid box shall contain the following equipment: - (i)
 - 6 small sterilised dressings.
 - (ii) Medium size sterilised dressings.
 - (iii) Large size sterilised dressings.
 - (iv) Large sterilised burn dressings.
 - (v) 1(30ml.) bottle containing two percent alcoholic solution of iodine.
- (d) 1 (30 ml.) bottle containing salvolatile having the dose and mode of administration indicated on the label.
 - (i) 1 snakebite lancet.
 - (ii) 1 (30 gms.) bottle of potassium permanganate crystals.
 - (iii) 1 pair scissors.
- (e) 1 copy of the first-aid leaflet issued by the Director General, Factory Advice Service and Labour Institutes, Government of India.
 - (i) 1 bottle containing 100 tablets (each of 5 gms.) of aspirin.
 - (ii) Ointment for burns.
 - (iii) A bottle of suitable surgical antiseptic solution.
- (f) For workplaces in which the number of contract labour exceed 50. Each first-aid box shall contain the following equipment's.
 - (i) 12 small, sterilised dressings.
 - (ii) 6 medium size sterilised dressings.
 - (iii) 6 large size sterilised dressings.
 - (iv) 6 large size sterilised burn dressings.
 - (v) 6 (15 gms.) packets sterilised cotton wool.
 - (vi) 1 (60 ml.) bottle containing a two per cent alcoholic solution iodine.

- (vii) 1 (60 ml.) bottle containing salvolatile having the dose and mode of administration indicated on the label.
 - (viii) 1 roll of adhesive plaster.
 - (ix) 1 snake bite lancet.
 - (x) 1 (30 gms.) bottle of potassium permanganate crystals.
 - (xi) 1 pair scissors.
 - (xii) 1 copy of the first-aid leaflet issued by the Director General Factory Advice Service and Labour Institutes /Government of India.
 - (xiii) A bottle containing 100 tablets (each of 5 gms.) of aspirin.
 - (xiv) Ointment for burns.
 - (xv) A bottle of suitable surgical antiseptic solution.
- (g) Adequate arrangements shall be made for immediate recoupment of the equipment when necessary.
- (h) The first-aid box shall be kept in charge of a responsible person who shall always be readily available during the working hours of the work place.
- (i) A person in charge of the First-aid box shall be a person trained in First-aid treatment in the work places where the number of contract labour employed is 150 or more.
- (j) In work places where the number of contract labour employed is 500 or more and hospital facilities are not available within easy distance from the works. First-aid posts shall be established and run by a trained compounder. The compounder shall be on duty and shall be available at all hours when the workers are at work.
- (k) Where work places are situated in places which are not towns or cities, a suitable motor transport shall be kept readily available to carry injured person or person suddenly taken ill to the nearest hospital.

D. DRINKING WATER

- (a) In every work place, there shall be provided and maintained at suitable places, easily accessible to labour, a sufficient supply of cold water fit for drinking.
- (b) Where drinking water is obtained from an Intermittent public water supply, each work place shall be provided with storage where such drinking water shall be stored.
- (c) Every water supply or storage shall be at a distance of not less than 50 feet from any latrine drain or other source of pollution. Where water has to be drawn from an existing well which is within such proximity of latrine, drain or any other source of pollution, the well shall be properly chlorinated before water is drawn from it for drinking. All such wells shall be entirely closed in and be provided with a trap door which shall be dust and waterproof.
- (d) A reliable pump shall be fitted to each covered well, the trap door shall be kept locked and opened only for cleaning or inspection which shall be done at least once a month.

E. WASHING FACILITIES

- (a) In every work place adequate and suitable facilities for washing shall be provided and maintained for the use of contract labour employed therein.
- (b) Separate and adequate cleaning facilities shall be provided for the use of male and female workers.
- (c) Such facilities shall be conveniently accessible and shall be kept in clean and hygienic condition.

F. LATRINES AND URINALS

- (a) Latrines shall be provided in every work place on the following scale namely: -
- (b) Where female is employed, there shall be at least one latrine for every 25 females.
- (c) Where males are employed, there shall be at least one latrine for every 25 males.
- (d) Provided that, where the number of males or females exceeds 100, it shall be sufficient if there is one latrine for 25 males or females as the case may be up to the first 100, and one for every 50 thereafter.
- (e) Every latrine shall be under cover and so partitioned off as to secure privacy, and shall have a proper door and fastenings
- (f) Construction of latrines: The inside walls shall be constructed of masonry or some suitable heat- resisting non-absorbent materials and shall be cement washed inside and outside at least once a year, Latrines shall not be of a standard lower than borehole system.
- (g) Where workers of both sexes are employed, there shall be displayed outside each block of latrine and urinal, a notice in the language understood by the majority of the workers "For Men only" or "For Women Only" as the case may be.
- (h) The notice shall also bear the figure of a man or of a woman, as the case may be.
- (i) There shall be at least one urinal for male workers up to 50 and one for female workers up to fifty employed at a time, provided that where the number of male or female workmen, as the case may be exceeding 500, it shall be sufficient if there is one urinal for every 50 males or females up to the first 500 and one for every 100 or part thereafter.
 - (i) The latrines and urinals shall be adequately lighted and shall be maintained in a clean and sanitary condition at all times.
 - (ii) Latrines and urinals other than those connected with a flush sewage system shall comply with the requirements of the Public Health Authorities.
- (j) Water shall be provided by means of tap or otherwise so as to be conveniently accessible in or near the latrines and urinals.
- (k) Disposal of excreta: - Unless otherwise arranged for by the local sanitary authority, arrangements for proper disposal of excreta by incineration at the work place shall be made by means of a suitable incinerator. Alternately excreta may be disposed of by putting a layer of night soil at the bottom of a pucca tank prepared for the purpose and covering it with a 15 cm. layer of waste or refuse and then covering it with a layer of earth for a fortnight (when it will turn to manure).
- (l) The Contractor shall at his own expense, carry out all instructions issued to him by the Engineer-in- Charge to effect proper disposal of night soil and other conservancy work in respect of the Contractor's workmen or employees on the site. The Contractor shall be responsible for payment of any charges which may be levied by Municipal or Cantonment Authority for execution of such on his behalf.

G. PROVISION OF SHELTER DURING REST (Deleted)

~~At every place there shall be provided, free of cost, four suitable sheds, two for meals and the other two for rest separately for the use of men and women labour. The height of each shelter shall not be less than 3 metres (10 ft.) from the floor level to the lowest part of the roof. These shall be kept clean and the space provided shall be on the basis of 0.6 sqm. per head.~~

~~Provided that the Engineer-in-Charge may permit subject to his satisfaction, a portion of the building under construction or other alternative accommodation to be used for the purpose.~~

H. CRECHES- Deleted

- ~~(a) At every work place, at which 20 or more women worker are ordinarily employed, there shall be provided two rooms of reasonable dimensions for the use of their children under the age of six years. One room shall be used as a play room for the children and the other as their bedroom. The rooms shall be constructed with specifications as per clause 19H (ii) a,b& c.~~
- ~~(b) The rooms shall be provided with suitable and sufficient openings for light and ventilation. There shall be adequate provision of sweepers to keep the places clean.~~
- ~~(c) The Contractor shall supply adequate number of toys and games in the play room and sufficient number of cots and beddings in the bed room.~~
- ~~(d) The Contractor shall provide one ayaa to look after the children in the creche when the number of women workers does not exceed 50 and two when the number of women workers exceed 50.~~
- ~~(e) The use of the rooms earmarked as creches shall be restricted to children, their attendants and mothers of the children.~~

I. CANTEENS- Deleted

- ~~(a) In every work place where the work regarding the employment of contract labour is likely to continue for six months and where in contract labour numbering one hundred or more are ordinarily employed, an adequate canteen shall be provided by the Contractor for the use of such contract labour.~~
- ~~(b) The canteen shall be maintained by the Contractor in an efficient manner.~~
- ~~(c) The canteen shall consist of at least a dining hall, kitchen, storeroom, pantry and washing places separately for workers and utensils.~~
- ~~(d) The canteen shall be sufficiently lighted at all times when any person has access to it.~~
- ~~(e) The floor shall be made of smooth and impervious materials and inside walls shall be lime washed or colour washed at least once in each year.~~
- ~~(f) Provided that the inside walls of the kitchen shall be lime washed every four months.~~
- ~~(g) The premises of the canteen shall be maintained in a clean and sanitary condition.~~
- ~~(h) Waste water shall be carried away in suitable covered drains and shall not be allowed to accumulate so as to cause a nuisance.~~
- ~~(i) Suitable arrangements shall be made for the collection and disposal of garbage.~~
- ~~(j) The dining hall shall accommodate at a time 30 per cent of the contract labour working at a time.~~
- ~~(k) The floor area of the dining hall, excluding the area occupied by the service counter and any furniture except tables and chairs shall not be less than one square metre per diner to be accommodated as prescribed in sub-Rule 9.~~
- ~~(i) A portion of the dining hall and service counter shall be partitioned off and reserved for women workers in proportion to their number.~~
- ~~(ii) Washing places for women shall be separate and screened to secure privacy.~~
- ~~(a) Sufficient tables stools, chair or benches shall be available for the number of diners to be accommodated as prescribed in sub-Rule 9.~~

- ~~(b) There shall be provided and maintained sufficient utensils crockery, furniture and any other equipment necessary for the efficient running of the canteen.~~
- ~~(c) The furniture utensils and other equipment shall be maintained in a clean and hygienic condition.~~
- ~~(d) Suitable clean clothes for the employees serving in the canteen shall be provided and maintained.~~
- ~~(e) A service counter, if provided, shall have top of smooth and impervious material.~~
- ~~(f) Suitable facilities including an adequate supply of hot water shall be provided for the cleaning of utensils and equipment's.~~
- ~~(g) The food stuffs and other items to be served in the canteen shall be in conformity with the normal habits of the contract labour.~~
- ~~(h) The charges for food stuffs, beverages and any other items served in the canteen shall be based on 'No profit, No loss' and shall be conspicuously displayed in the canteen.~~
- ~~(i) In arriving at the price of foodstuffs, and other article served in the canteen, the following items shall not be taken into consideration as expenditure namely:-(i) The rent of land and building.~~
 - ~~(ii) The depreciation and maintenance charges for the building and equipment provided for the canteen.~~
 - ~~(iii) The cost of purchase, repairs and replacement of equipment including furniture, crockery, cutlery and utensils.~~
 - ~~(iv) The water charges and other charges incurred for lighting and ventilation.~~
 - ~~(v) The interest and amounts spent on the provision and maintenance of equipment provided for the canteen.~~
- ~~(j) The accounts pertaining to the canteen shall be audited once every 12 months by registered accountants and auditors.~~

J. ANTI-MALARIAL PRECAUTIONS:

- (a) The Contractor shall at his own expense, conform to all anti-malarial instructions given to him by the Engineer- in-Charge including the filling up of any borrow pits which may have been dug by him.
- (b) The above rules shall be incorporated in the contracts and in notices inviting tenders and shall form an integral part of the contracts.

K. AMENDMENTS

Government may, from time to time, add to or amend these rules and issue directions. Contractor shall abide by such amendments and strict implication of the same as part of the obligation under this Contract.

9. CONTRACTOR’S LABOUR REGULATIONS

A. SHORT TITLE

These regulations may be called the CPWD / PWD (DA) Contractors Labour Regulations.

B. DEFINITIONS

- (a) Workman means any person employed by IITB or its Contractor directly or indirectly through a subcontractor with or without the knowledge of the IITB to do any skilled, semiskilled or unskilled manual, supervisory, technical or clerical work for hire or reward, whether the terms of employment are expressed or implied but does not include any person: -
- (i) Who is employed mainly in a managerial or administrative capacity: or
 - (ii) Who, being employed in a supervisory capacity draws wages exceeding five hundred rupees per mensem or exercises either by the nature of the duties attached to the office or by reason of powers vested in him, functions mainly of managerial nature: or
 - (iii) Who is an out worker, that is to say, person to whom any article or materials are given out by or on behalf of the principal employers to be made up cleaned, washed, altered, ornamental finished, repaired adopted or otherwise processed for sale for the purpose of the trade or business of the principal employers and the process is to be carried out either in the home of the out worker or in some other premises, not being premises under the control and management of the principal employer.
- (b) No person below the age of 14 years shall be employed to act as a workman.
- (c) Fair Wages means wages whether for time or piece work fixed and notified under the provisions of the Minimum Wages Act from time to time.
- (d) Contractors shall include every person who undertakes to produce a given result other than a mere supply of goods or articles of manufacture through contract labour or who supplies contract labour for any work and includes a subcontractor.
- (e) Wages shall have the same meaning as defined in the Payment of Wages Act.
- (f) Normally working hours of an adult employee should not exceed 9 hours a day. The working day shall be so arranged that inclusive of interval for rest, if any, it shall not spread over more than 12 hours on any day.
- (g) When an adult worker is made to work for more than 9 hours on any day or for more than 48 hours in any week, he shall be paid over time for the extra hours put in by him at double the ordinary rate of wages.
- (h) Every worker shall be given a weekly holiday normally on a Sunday, in accordance with the provisions of the Minimum Wages (Central) Rules 1960 as amended from time to time irrespective of whether such worker is governed by the Minimum Wages Act or not.
- (i) Where the minimum wages prescribed by the Government under the Minimum Wages Act are not inclusive of the wages for the weekly day of rest, the worker shall be entitled to rest day wages at the rate applicable to the next preceding day, provided he has worked under the same Contractor for a continuous period of not less than 6 days.
- (j) Where a Contractor is permitted by the Engineer-in-Charge to allow a worker to work on a normal weekly holiday, he shall grant a substituted holiday to him for the whole day on one of the five days immediately before or after the normal weekly holiday and

pay wages to such worker for the work performed on the normal weekly holiday at overtime rate.

C. DISPLAY OF NOTICE REGARDING WAGES ETC.

The Contractor shall before he commences his work on contract, display and correctly maintain and continue to display and correctly maintain in a clear and legible condition in conspicuous places on the work, notices in English and in the local Indian languages spoken by the majority of the workers giving the minimum rates of wages fixed under Minimum Wages Act, the actual wages being paid, the hours of work for which such wage are earned, wages periods, dates of payments of wages and other relevant information as per Appendix 'III'.

D. PAYMENT OF WAGES

- (a) The Contractor shall fix wage periods in respect of which wages shall be payable.
- (b) No wage period shall exceed one month.
- (c) The wages of every person employed as contract labour in an establishment or by a Contractor where less than one thousand such persons are employed shall be paid before the expiry of seventh day and in other cases before the expiry of tenth day after the last day of the wage period in respect of which the wages are payable.
- (d) Where the employment of any worker is terminated by or on behalf of the Contractor the wages earned by him shall be paid before the expiry of the second working day from the date on which his employment is terminated.
- (e) All payment of wages shall be made on a working day at the work premises and during the working time and on a date notified in advance and in case the work is completed before the expiry of the wage period, final payment shall be made within 48 hours of the last working day.
- (f) Wages due to every worker shall be paid to him direct by Contractor through Bank or ECS or online transfer to his bank account.
- (g) All wages shall be paid through Bank or ECS or online transfer.
- (h) Wages shall be paid without any deductions of any kind except those specified by the Central Government by general or special order in this behalf or permissible under the Payment of Wages Act 1956.
- (i) A notice showing the wages period and the place and time of disbursement of wages shall be displayed at the place of work and a copy sent by the Contractor to the Engineer-in-Charge under acknowledgment.
- (j) It shall be the duty of the Contractor to ensure the disbursement of wages through bank account of labour.
- (k) The Contractor shall obtain from the Junior Engineer or any other authorised representative of the Engineer- in-Charge as the case may be, a certificate under his signature at the end of the entries in the “Register of Wages” or the “Wage-cumMuster Roll” as the case may be in the following form: -
 - (l) “Certified that the amount shown in column No has been paid to the workman concerned through bank account of labour on at.....”

E. FINES AND DEDUCTIONS WHICH MAY BE MADE FROM WAGES

- (a) The wages of a worker shall be paid to him without any deduction of any kind except the following: -

- (b) Fines
- (c) Deductions for absence from duty i.e., from the place or the places where by the terms of his employment he is required to work. The amount of deduction shall be in proportion to the period for which he was absent.
- (d) Deduction for damage to or loss of goods expressly entrusted to the employed person for custody or for loss of money or any other deduction which he is required to account, where such damage or l
- (e) Deduction for recovery of advances or for adjustment of overpayment of wages, advances granted shall be entered in a register.
- (f) Any other deduction which the Central Government may from time to time allow.
- (g) No fines should be imposed on any worker save in respect of such acts and omissions on his part as have been approved of by the Chief Labour Commissioner.
Note: - An approved list of Acts and Omissions for which fines can be imposed is enclosed at Appendix-X
- (h) No fine shall be imposed on a worker and no deduction for damage or loss shall be made from his wages until the worker has been given an opportunity of showing cause against such fines or deductions.
- (i) The total amount of fine which may be imposed in any one wage period on a worker shall not exceed an amount equal to three paise in a rupee of the total wages, payable to him in respect of that wage period.
- (j) No fine imposed on any worker shall be recovered from him by instalment, or after the expiry of sixty days from the date on which it was imposed.
- (k) Every fine shall be deemed to have been imposed on the day of the act or omission in respect of which it was imposed.

F. LABOUR RECORDS

- (a) The Contractor shall maintain a Register of persons employed on work on contract in Form XIII of the CL(R&A) Central Rules 1971 (Appendix IV)
- (b) The Contractor shall maintain a Muster Roll register in respect of all workmen employed by him on the work under Contract in Form XVI of the CL (R&A) Rules 1971 (Appendix V).
- (c) The Contractor shall maintain a Wage Register in respect of all workmen employed by him on the work under contract in Form XVII of the CL (R&A) Rules 1971 (Appendix VI).
- (d) Register of accidents - The Contractor shall maintain a register of accidents in such form as may be convenient at the work place but the same shall include the following particulars:
 - (e) Full particulars of the labourers who met with accident.
 - (f) Rate of Wages.
 - (g) Sex
 - (h) Age
 - (i) Nature of accident and cause of accident. (j) Time and date of accident.
 - (k) Date and time when admitted in Hospital,
 - (l) Date of discharge from the Hospital.

- (m) Period of treatment and result of treatment.
- (n) Percentage of loss of earning capacity and disability as assessed by Medical Officer.
- (o) Claim required to be paid under Workmen’s Compensation Act.
- (p) Date of payment of compensation.
- (q) Amount paid with details of the person to whom the same was paid.
- (r) Authority by whom the compensation was assessed.
- (s) Remarks
- (t) The Contractor shall maintain a Register of Fines in the Form XII of the CL (R&A) Rules 1971 (Appendix-XI)
- (u) The Contractor shall display in a good condition and in a conspicuous place of work the approved list of acts and omissions for which fines can be imposed (Appendix-X)
 - (i) The Contractor shall maintain a Register of deductions for damage or loss in Form XX of the CL (R&A) Rules 1971 (Appendix-XII)
 - (ii) The Contractor shall maintain a Register of Advances in Form XXIII of the CL (R&A) Rules 1971(Appendix-XIII)
 - (iii) The Contractor shall maintain a Register of Overtime in Form XXIII of the CL (R&A) Rules 1971(Appendix-XIV).

G. ATTENDANCE CARD-CUM-WAGE SLIP

- (a) The Contractor shall issue an Attendance card-cum-wage slip to each workman employed by him in the specimen form at (Appendix-VII).
- (b) The card shall be valid for each wage period.
- (c) The Contractor shall mark the attendance of each workman on the card twice each day, once at the commencement of the day and again after the rest interval, before he actually starts work.
- (d) The card shall remain in possession of the worker during the wage period under reference.
- (e) The Contractor shall complete the wage slip portion on the reverse of the card at least a day prior to the disbursement of wages in respect of the wage period under reference.
- (f) The Contractor shall obtain the signature or thumb impression of the worker on the wage slip at the time of disbursement of wages and retain the card with himself.

H. EMPLOYMENT CARD

The Contractor shall issue an Employment Card in Form XIV of the CL (R&A) Central Rules 1971 to each worker within three-days of the employment of the worker (Appendix-VIII).

I. SERVICE CERTIFICATE

On termination of employment for any reason whatsoever the Contractor shall issue to the workman whose services have been terminated, a Service certificate in Form XV of the CL (R&A) Central Rules 1971 (Appendix-IX).

J. PRESERVATION OF LABOUR RECORDS

All records required to be maintained under Regulations Nos. 6 & 7 shall be preserved in original for a period of three years from the date of last entries made in them and

shall be made available for inspection by the Engineer-in-Charge or Labour Officer or any other officers authorised by the Ministry of Urban Development in this behalf.

K. POWER OF LABOUR OFFICER TO MAKE INVESTIGATIONS OR ENQUIRY

The Labour Officer or any person authorised by Central Government on their behalf shall have power to make enquires with a view to ascertaining and enforcing due and proper observance of Fair Wage Clauses and the Provisions of these Regulations. He shall investigate into any complaint regarding the default made by the Contractor or subcontractor in regard to such provision.

L. REPORT OF LABOUR OFFICER

The Labour Officer or other persons authorised as aforesaid shall submit a report of result of his investigation or enquiry to the Executive Engineer concerned indicating the extent, if any, to which the default has been committed with a note that necessary deductions from the Contractor’s bill be made and the wages and other dues be paid to the labourers concerned. In case an appeal is made by the Contractor under Clause 13 of these regulations, actual payment to labourers will be made by the Executive Engineer after the Superintending Engineer has given his decision on such appeal.

(a) The Executive Engineer shall arrange payments to the labour concerned within 45 days from the receipt of the report from the Labour Officer or the Superintending Engineer as the case may be.

M. APPEAL AGAINST THE DECISION OF LABOUR OFFICER

Any person aggrieved by the decision and recommendations of the Labour Officer or other person so authorised may appeal against such decision to the Superintending Engineer concerned within 30 days from the date of decision, forwarding simultaneously a copy of his appeal to the Executive Engineer concerned but subject to such appeal, the decision of the officer shall be final and binding upon the Contractor.

N. PROHIBITION REGARDING REPRESENTATION THROUGH LAWYER

(a) A workman shall be entitled to be represented in any investigation or enquiry under these regulations by:-

- (i) An officer of a registered trade union of which he is a member.
- (ii) An officer of a federation of trade unions to which the trade union referred to in clause (a) is affiliated.
- (iii) Where the employer is not a member of any registered trade union, by an officer of a registered trade union, connected with the industry in which the worker is employed or by any other workman employed in the industry in which the worker is employed.

(b) An employer shall be entitled to be represented in any investigation or enquiry under these regulations by:-

- (i) An officer of an association of employers of which he is a member.
- (ii) An officer of a federation of associations of employers to which association referred to in clause (a) is affiliated.
- (iii) Where the employer is not a member of any association of employers, by an officer of association of employer connected with the industry in which the employer is engaged or by any other employer, engaged in the industry in which the employer is engaged.
- (iv) No party shall be entitled to be represented by a legal practitioner in any investigation or enquiry under these regulations.

O. INSPECTION OF BOOKS AND SLIPS

The Contractor shall allow inspection of all the prescribed labour records to any of his workers or to his agent at a convenient time and place after due notice is received or to the Labour Officer or any other person, authorised by the Central Government on his behalf.

P. SUBMISSIONS OF RETURNS

The Contractor shall submit periodical returns as may be specified from time to time.

Q. AMENDMENTS

The Central Government may from time to time add to or amend the regulations and on any question as to the application/Interpretation or effect of those regulations the decision of the Engineer-In-Charge shall be final.

श्रम बोर्ड
Labour Board

कार्य का नाम.....

Name of work

ठेकेदार का नाम.....

Name of Contractor

ठेकेदार का पता.....

Address of Contractor

के० लो० नि० विभाग के मंडल का नाम व पता.....

Name and address of C.P.W.D. Division

के. लो. नि. विभाग के श्रम अधिकारी का नाम

Name of C.P.W.D. Labour Officer

के. लो. नि. विभाग के श्रम अधिकारी का पता.....

Address of C.P.W.D. Labour Officer

श्रम कार्यान्वयन अधिकारी का नाम

Name of Labour Enforcement Officer

श्रम कार्यान्वयन अधिकारी का पता

Address of Labour Enforcement Officer

क्रम संख्या Sl. No.	श्रेणी Category	न्यूनतम निर्धारित मजदूरी Minimum wage fixed	भुगतान की गई वास्तविक मजदूरी Actual wage paid	वर्तमान संख्या Number present	टिप्पणी Remarks

साप्ताहिक छुट्टी

Weekly holiday

मजदूरी की अवधि.....

Wage period

मजदूरी के भुगतान की तारीख

Date of payment of wages

काम के घंटे.....

Working hours

आराम का मध्यान्तर.....

Rest interval

फॉर्म 13 Form-XIII (कृपया नियम 75 देखें) (See Rule 75)

ठेकेदार द्वारा लगाये गए मजदूरों का रजिस्टर Register of Workmen Employed by Contractor

ठेकेदार का नाम व पता.....

Name and address of contractor

कार्यालय का नाम व पता जिसके अधीन ठेका चल रहा है

Name and address of establishment under which contract is carried on

कार्य का स्वरूप व स्थान

Nature and location of work

मुख्य नियोक्ता का नाम व पता

Name and address of Principal Employer

क्र. संख्या	मजदूर का नाम	आयु तथा लिंग	पिता/पति का नाम	कार्य का स्वरूप/ पद का नाम	मजदूर का स्थायी गृह पता (गांव व तहसील ताल्लुक और जिला)	स्थानीय पता	नौकरी आरम्भ होने की तारीख	मजदूर के हस्ताक्षर/अंगूठे का निशान	नौकरी से बरखास्त करने की तारीख	बरखास्त करने के कारण	टिप्पणी
Sl. No.	Name and Surname of workman	Age and Sex	Father's/Husband's name	Nature of employment/ designation	Permanent home address of the workman (Village and Tehsil, Taluk and District)	Local address	Date of commencement of employment	Signature or thumb impression of the workman	Date of termination of employment	Reasons for terminations	Remarks
1	2	3	4	5	6	7	8	9	10	11	12

Appendix IV

फार्म 16 Form-XVI (कृपया नियम 78 (2)(क) देखें) (See Rule 78(2)(a))
मस्टर रोल Muster Roll

ठेकेदार का नाम व पता.....
 Name and address of contractor
 कार्यालय का नाम और पता जिसके अधीन ठेका चल रहा है
 Name and address of establishment under which contract is carried on
 कार्य का स्वरूप व स्थान.....
 Nature and location of work
 मुख्य नियोजता का नाम व पता..... महीने पक्ष के लिए.....
 Name and address of Principal Employer. For the Month of fortnight

क्र. संख्या Sl. No	मजदूर का नाम Name of Workman	लिंग Sex	पिता/पति का नाम Father's/Husband's name	दिनांक Dates	टिप्पणी Remarks
1		3	4	5	6
				1	
				2	
				3	
				4	
				5	



परिशिष्ट / Appendix 'VI'

फॉर्म 17 Form-XVII (कृपया नियम 78 (2)(क) देखें) (See Rule 78(2)(a))
मजदूरी रजिस्टर Register of wages

ठेकेदार का नाम व पता.....
 Name and address of contractor
 कार्यालय का नाम व पता जिसके अधीन ठेका चल रहा है
 Name and address of establishment under which contract is carried on
 कार्य का स्वरूप व स्थान.....
 Nature and location of work
 मुख्य नियोजता का नाम व पता..... मजदूरी की अवधि: मासिक या पाक्षिक
 Name and address of Principal Employer..... wages Period: Monthly/Fortnight

क्र. संख्या Sl. No.	मजदूर का नाम Name of workman	मजदूरी के रजिस्टर में क्रम संख्या Serial No. in the register of workman	मजदूरों के लिए गए कार्य का स्वरूप/पदनाम Designation/nature of work done	जितने दिन कार्य किया No. of days worked	किए गए कार्य के एकक Units of work done	मजदूरी की दर/पैस रेट Daily rate of wages/ piece rate	की गई मजदूरी की रकम Amount of wages earned				कुली, यदि कोई है (कुली का स्वरूप लिखें) Deductions if any (indicate nature)	भुगतान की गई शुद्ध राशि Net amount paid	मजदूर के हस्ताक्षर/अंगूठे का निशान Signature or thumb impression of the workman	ठेकेदार अथवा उसके प्रतिनिधि के हस्ताक्षर Initial of contractor or his representative	
							मूल मजदूरी Basic wages	महंगाई भत्ता Dearness allowances	समयोपेरी भत्ता Overtime	अन्य नकद भुगतान के स्वरूप लिखें Other cash payments (Indicate nature)					जोड़ Total
1							8	9	10	11	12	13	14	15	16

परिशिष्ट / Appendix 'VII' CPWD
(सीधी तरफ / Obverse)

मजदूरी कार्ड संख्या / Wage Card No.....

मजदूरी कार्ड Wage Card

ठेकेदार का नाम व पता..... जारी करने की तारीख

Name and address of contractor Date of Issue

कार्य का नाम व स्थान..... पद.....

Name and location of work Designation

मजदूर का नाम..... मास / पक्ष.....

Name of workman Month/Fortnight

मजदूरी की दर.....

Rate of Wages

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
प्रातः																															
Morning																															
सायं																															
Evening																															
हस्ताक्षर																															
Initial																															

..... से अपनी मजदूरी के..... रूपये प्राप्त किए

Received from the sum of Rs. on account of my wages

यह मजदूरी कार्ड जारी होने की तारीख से एक मास तक के लिए वैध है।
The Wage Card is valid for one month from the date of issue

हस्ताक्षर Signature.



फार्म 19/Form-XIX

(कृपया नियम 78(2)(ख) देखें)
[See rule 78 (2)(b)]

**मजदूरी कार्ड
Wages Slip**

ठेकेदार का नाम व पता

Name and address of contractor.....

मजदूर का नाम तथा उसके पिता/पति का नाम

Name and Father's/Husband's name of workman.....

कार्य का स्वरूप तथा स्थान का नाम

Nature and location of work.....

सप्ताह/पक्ष/मास के लिए

For the Week/Fortnight/Month ending.....

1. जितने दिन कार्य किया

No. of days worked.....

2. किए गए कार्य के एककों की संख्या (पीस रेट मजदूरों के बारे में)

No. of units worked in case of piece rate workers.....

3. दैनिक मजदूरी की दर/पीस रेट

Rate of dailly wages/piece rate

4. समयोपरि मजदूरी की रकम

Amount of overtime wages.....

5. दी जाने वाली कुल रकम

Gross wages payable.....

6. वसूलियां, यदि कोई हो

Deduction, if any.....

7. दी गई मजदूरी की शुद्ध रकम

Net amount of wages paid.....

ठेकेदार अथवा उसके प्रतिनिधि के हस्ताक्षर
Initials of the contractor or his representative

Appendix VIII

फार्म 14 / Form-XIV
(कृपया नियम 76 देखें)
[See rule 76]

**रोजगार कार्ड
Employment Card**

ठेकेदार का नाम व पता

Name and address of contractor-----

कार्यालय का नाम व पता जिसके अधीन ठेका चल रहा है

Name and address of establishment under which contract is carried on-----

कार्य का नाम व स्थान

Name of work and location of work-----

मुख्य नियोक्ता का नाम व पता

Name and address of Principal Employer-----

1. मजदूर का नाम

Name of the workman-----

2. लगाये गए मजदूरों के रजिस्टर में क्रम संख्या

Sl. No. in the register of workman employed-----

3. रोजगार/पद का नाम

Nature of employment/designation-----

4. मजदूरी की दर

(पीस वर्क के बारे में एकक के ब्यौरा सहित)

Wage rate (with particulars of unit in case of piece work)-----

5. मजदूरी की अवधि

Wage period-----

6. रोजगार की अवधि

Tenure of employment-----

7. टिप्पणी

Remarks-----

ठेकेदार के हस्ताक्षर
Signature of contractor



फार्म 15 Form-XV (कृपया नियम 77 देखें) (See Rule 77)
सेवा प्रमाणपत्र Service Certificate

परिशिष्ट / Appendix 'IX'

ठेकेदार का नाम व पता.....
Name and address of contractor
 कार्य का स्वरूप तथा स्थान.....
Nature and location of work
 मजदूर का नाम व पता.....
Name and address of workman
 आयु अथवा जन्म तिथि.....
Age or date of birth
 पहचान चिन्ह
Identification marks
 पिता / पति का नाम.....
Father's/Husband's name
 कार्यालय का नाम व पता जिसके अधीन ठेका चल रहा है.....
Name and address of establishment in under which contract is carried on
 मुख्य नियोक्ता का नाम और पता.....
Name and address of Principal Employer

क्र. संख्या SI. No	रोजगार की कुल अवधि Total Period for which employed से From	तक To	किए गए कार्य का स्वरूप Nature of Work Done	मजदूरी दर (पीस वर्क के मामले में एकक के ब्योरों सहित) Rate of wages (with particulars of unit in case of piece work)	टिप्पणी Remarks
1	2	3	4	5	6

हस्ताक्षर / Signature

Appendix X

LIST OF ACTS AND OMISSIONS FOR WHICH FINES CAN BE IMPOSED

ऐसे कार्यों तथा भूलों की सूची जिसके लिए जुर्माने किये जा सकते हैं

केन्द्रीय लोक निर्माण विभाग ठेकेदार श्रमिक विनियमों के नियम 7 (v) के अनुसार कार्य स्थल पर अंग्रेजी तथा स्थानीय भाषा दोनों में अच्छी तथा स्थानीय भाषा दोनों में अच्छी प्रकार से प्रदर्शित किया जाना।	In accordance with rule 7(v) of the CPWD Contractor’s Labour Regulations to be displayed prominently at the site of work both in English and local Language.
1. जान बूझ कर अकेले या अन्य के साथ मिल कर अवज्ञा या उल्लंघन।	1. Wilful insubordination or disobedience, whether alone or in combination with other.
2. केन्द्रीय लोक निर्माण विभाग के कार्य या सम्पत्ति के अतिरिक्त, ठेकों के संबंध में चोरी धोखाबाजी, बेईमानी करना।	2. Theft fraud or dishonesty in connection with the contractors beside a business or property of CPWD.
3. घूस या अन्य गैरकानूनी परितोषण लेना या देना।	3. Taking or giving bribes or any illegal gratifications
4. नित्य देर से काम पर आना।	4. Habitual late attendance.
5. शराब पीकर लड़ना, उपद्रवी या बेदंगा या अन्यमनस्क व्यवहार।	5. Drunkenness lighting, riotous or disorderly or indifferent behaviour
6. नित्य लापरवाही।	6. Habitual negligence.
7. उस क्षेत्रों के आस-पास बीड़ी-सिग्रेट पीना जहां आग पकड़ने वाली या अन्य सामग्री रखी हो।	7. Smoking near or around the area where combustible or other materials are locked
8. नित्य अनुशासनहीनता।	8. Habitual indiscipline.
9. चालू कार्य में अथवा के. लो. नि. वि. या ठेकेदार की संपत्ति को क्षति पहुंचाना।	9. Causing damage to work in the progress or to property of the CPWD or of the contractor.
10. ड्युटी पर सोना।	10. Sleeping on duty.
11. कामचोरी या कार्य को धीरे करना।	11. Malingering or slowing down work.
12. नाम, आयु, पिता के नाम आदि के बारे में गलत सूचना देना।	12. Giving of false information regarding name, age father’s name, etc.
13. नियोक्ता द्वारा दिये गये मजदूरी कार्ड को नित्य खो देना।	13. Habitual loss of wage cards supplied by the employers.
14. मालिक की उत्पादन की सम्पत्ति का अनधिकृत उपयोग या कार्यस्थल पर अनाधिकृत वस्तुएं बनाना।	14. Unauthorised use of employer’s property of manufacturing or making of unauthorised particles at the work place.
15. कुशल कामगारों द्वारा निर्माण तथा अनुरक्षण में अकुशल कारीगरी दिखाना जिसे विभाग स्वीकार नहीं करता जिसके संशोधन के लिये ठेकेदार को बाध्य किया जाता है।	15. Bad workmanship in construction and maintenance by skilled workers which is not approved by the Department and for which the contractors are compelled to undertake rectifications.
16. गलत शिकायतें लगाना और/या भ्रामक विवरण देना।	16. Making false complaints and/or misleading statements.
17. स्थापनाओं के परिसर के भीतर कोई व्यापार चलाना।	17. Engaging on trade within the premises of the establishments.
18. कर्मचारियों का अनधिकृत व्यापार कार्य करना।	18. Any unauthorised divulgence of business affairs of the employees.
19. स्थापना के परिसर के भीतर किसी प्रकार का धन एकत्र करना या उसके लिए प्रचार करना जब तक कि मालिक द्वारा अधिकार न दिया गया हो।	19. Collection or canvassing for the collection of any money within the premises of an establishment unless authorised by the employer.

20. मालिकों की पूर्व अनुमति के बिना परिसर के भीतर बैठकें बुलाना।	20. Holding meeting inside the premises without previous sanction of the employers.
21. परिसर के भीतर कार्य समय के दौरान किसी कामगार या कर्मचारी को डराना या धमकाना।	21. Threatening or intimidating any workman or employer during the working hours within the premises.

फार्म 12 Form-XII (कृपया नियम 78(2)घ) देखें) (See Rule 78(2) (d))

जुर्मानों का रजिस्टर Register of Fines

ठेकेदार का नाम व पता
 Name and address of contractor
 कार्यालय का नाम व पता जिसके अधीन ठेका चल रहा है
 Name and address of establishment in under which contract is carried on
 कार्य का स्वरूप व स्थान
 Nature and location of work
 मुख्य नियोजता का नाम व पता
 Name and address of Principal Employer

क्र. संख्या Sl. No.	मजदूर का नाम Name of workman	पिता/पति का नाम Father's/ Husband's name	नौकरी का स्वरूप/ घटनाम Designation/ nature of employment	वह कार्य/भूल जिसके लिए जुर्माना लगाया गया Act/Omission for which fine imposed	तारीख Date of Offence	क्या कर्मकार ने इस जुर्माने के विरुद्ध कोई कारण बताया है Whether workman showed cause against fine	उस व्यक्ति का नाम जिसकी उपस्थिति में कर्मचारी की ब्याख्या सुनी गई Name of person in whose presence employee's explanation was heard	मजदूरी की अवधि तथा देय मजदूरी Wage period and wages payable	जुर्माना की गई राशि Amount of fine imposed	जुर्माना जिस तिथि को समाप्त हुआ Date on which fine realised	टिप्पणी Remarks
1	2	3	4	5	6	7	8	9	10	11	12



फार्म 20 Form-XX (कृपया नियम 78(2)घ देखें) (See Rule 78(2) (d))

क्षति/हानि के लिए कटौती का रजिस्टर Register of Deduction for Damage or Loss

ठेकेदार का नाम व पता
 Name and address of contractor
 कार्यालय का नाम व पता जिसके अधीन ठेका चल रहा है
 Name and address of establishment in under which contract is carried on
 कार्य का स्वरूप व स्थान
 Nature and location of work
 मुख्य नियोक्ता का नाम व पता
 Name and address of Principal Employer

क्र. संख्या S.N.	मजदूर का नाम Name of Workman	पिता/पति का नाम Father's/Husband name	नौकरी का स्वरूप/ पदनाम Designation/ nature of employment	क्षति अथवा हानि का ब्यौरा Particulars of damage or loss	क्षति अथवा हानि की तारीख Date of damage or loss	क्या कर्मकार ने इस कटौती के विरुद्ध कोई कारण बताया है Whether workman showed cause against deduction	उस व्यक्ति का नाम जिसकी उपस्थिति में कर्मचारी की व्याख्या सुनी गई name of person in whose presence employee's explanation was heard	लगाई गई कटौती की राशि Amount of deduction imposed	किस्तों की संख्या No. of installments	वसूली की तिथि Date of recovery			टिप्पणी Remarking
										प्रथम किस्त First install- ment	अंतिम किस्त Last install- ment		
1	2	3	4	5	6	7	8	9	10	11	12	13	

परिशिष्ट / Appendix 'XII'

फॉर्म 22 Form-XXII (कृपया नियम 78(2)घ) देखें) (See Rule 78(2) (d))

अग्रिम का रजिस्टर Register of Advances

ठेकेदार का नाम व पता
 Name and address of contractor
 कार्यालय का नाम व पता जिसके अधीन ठेका चल रहा है
 Name and address of establishment in under which contract is carried on
 कार्य का स्वरूप व स्थान
 Nature and location of work
 मुख्य नियोजता का नाम व पता
 Name and address of Principal Employer

क्र. संख्या Sl. No.	1	2	3	4	5	6	7	8	9	10	11
मजदूर का नाम Name of workman	पिता/पति का नाम Father's/ Husband name	नौकरी का स्वरूप/ पदनाम Designation/ nature of employment	मजदूरी की अवधि तथा देय मजदूरी Wage Period and wages payable	दिए गए अग्रिम की तिथि, तथा राशि Date and amount of advance given	वह प्रयोजन जिसके लिए अग्रिम दिया गया Purpose(s) for which advance made	किसी की संख्या जिनके द्वारा अग्रिम लौटाया जाना है Number of installments by which advance to be repaid	लौटाई गई प्रत्येक किस्त की तिथि तथा राशि Date and amount of each install- ment repaid	वह तिथि जबकि अन्तिम किस्त लौटाई गई Date and which last installment was repaid	टिप्पणी Remarks		



फार्म 23 Form-XXIII (कृपया नियम 78(2)(च) देखें) (See Rule 78(2) (e))

समयोपरि रजिस्टर Register of Overtime

ठेकेदार का नाम व पता
 Name and address of contractor
 कार्यालय का नाम व पता जिसके अधीन ठेका चल रहा है
 Name and address of establishment in under which contract is carried on
 कार्य का स्वरूप व स्थान
 Nature and location of work
 मुख्य नियोक्ता का नाम व पता
 Name and address of Principal Employer

क्र. संख्या Sl. No.	मजदूर का नाम Name of Workman	पिता / पति का नाम Father's/ Husband's name	लिंग Sex	नौकरी का स्वरूप / Designation/ nature of employment	जिन तारीखों को समयोपरि कार्य किया Date on which Overtime worked	कुल समयोपरि कार्य अथवा पीस सेट के मामले में उत्पादन Total overtime worked or production in case of piece rated	मजदूरी की सामान्य दर Normal rate of wages	समयोपरि मजदूरी की दर Overtime rate of wages	समयोपरि कमाई Overtime earning	जिस दर पर समयोपरि दी Rate on which overtime paid	टिप्पणी Remarks
1	2	3	4	5	6	7	8	9	10	11	12

10. INTEGRITY PACT

(DECLARATION BY IITB)

To,

.....

.....

.....

Sub: NIT No. _____

Name of the work:

Dear Sir,

It is here by declared that IITB is committed to follow the principle of transparency, equity and competitiveness in public procurement.

The subject Notice Inviting Tender (NIT) is an invitation to offer made on the condition that the Bidder will sign the integrity Agreement, which is an integral part of tender / bid documents, failing which the tenderer / bidder will stand disqualified from the tendering process and the bid of the bidder would be summarily rejected.

This declaration shall form part and parcel of the Integrity Agreement and signing of the same shall be deemed as acceptance and signing of the Integrity Agreement on behalf of the IITB.

Yours faithfully

Superintending Engineer (Estate Office), IITB

INTEGRITY PACT

(UNDERTAKING BY THE BIDDER)

To,

Superintending Engineer (Estate Office) IITB,

.....

.....

Sub: Submission of the Tender for the work of _____

Dear Sir,

I/We acknowledge that IITB is committed to follow the principles thereof as enumerated in the Integrity Agreement enclosed with the tender / bid document.

I/We agree that the Notice Inviting Tender (NIT) is an invitation to offer made on the condition that I/We will sign the enclosed integrity Agreement, which is an integral part of tender documents, failing which I/We will stand disqualified from the tendering process. I/We acknowledge that THE MAKING OF THE BID SHALL BE REGARDED AS AN UNCONDITIONAL AND ABSOLUTE AND ACCEPTANCE of this condition of the NIT.

I/We confirm acceptance and compliance with the Integrity Agreement in letter and spirit and further agree that execution of the said Integrity Agreement shall be separate and distinct from the Contract, which will come into existence when tender/bid is finally accepted by IITB. I/We acknowledge and accept the duration of the Integrity Agreement, which shall be in line with Para 6 of the enclosed Integrity Agreement.

I/We acknowledge that in the event of my/our failure to sign and accept the Integrity Agreement, while submitting the tender/bid, IITB shall have unqualified, absolute and unfettered right to disqualify the tenderer/bidder and reject the tender/bid in accordance with the terms and conditions of the tender/ bid.

Yours faithfully

(Duly authorized signatory of the Bidder)

To be signed by the bidder and same signatory competent / authorized to sign the relevant Contract on behalf of IITB.

INTEGRITY AGREEMENT

This Integrity Agreement is made at on this day of 20
.....

BETWEEN

Superintending Engineer, estate office, IIT
Bombay.....
(Herein referred as the

(Address of Division)

'Principal/Owner', which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns)

AND

.....
.....

(Name and Address of the Individual/firm/Company)

ugh(Hereinafter referred
as the (Details of duly authorized signatory)

"Bidder/Contractor" and which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns)

Preamble

WHEREAS the Principal / Owner has floated the Tender (NIT No _____)
(hereinafter

Referred to as "Tender / Bid") and intends to award, under laid down organizational procedure,

Contract for Comprehensive interior upgradation and refurbishment of auditorium, seminar rooms, conference room, atrium and VIP lounge including civil furniture, PHE, MEP, HVAC and LMS works of Victor Menezes convention centre at IIT Bombay Powai, Mumbai – 400076. hereinafter referred to as the "Contract".

AND WHEREAS the Principal / Owner values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness / transparency in its relation with its Bidder(s) and Contractor(s).

AND WHEREAS to meet the purpose aforesaid both the parties have agreed to enter into this Integrity Agreement (hereinafter referred to as "Integrity Pact" or "Pact"), the terms and conditions of which shall also be read as integral part and parcel of the Tender / Bid documents and Contract between the parties.

NOW, THEREFORE, in consideration of mutual covenants contained in this Pact, the parties hereby agree as follows cv and this Pact witnesses as under:

Article 1: Commitment of the Principal / Owner

- (1) The Principal/Owner commits itself to take all measures necessary to prevent corruption and to observe the following principles:
 - a. No employee of the Principal / Owner, personally or through any of his / her family members, will in connection with the Tender, or the execution of the Contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
 - b. The Principal / Owner will, during the Tender process, treat all Bidder(s) with equity and reason. The Principal/Owner will, in particular, before and during the Tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential / additional information through which the Bidder(s) could obtain an advantage in relation to the Tender process or the Contract execution.
 - c. The Principal / Owner shall endeavour to exclude from the Tender process any person, whose conduct in the past has been of biased nature.
- (2) If the Principal / Owner obtains information on the conduct of any of its employees which is a criminal offence under the Indian Penal code (IPC) / Prevention of Corruption Act, 1988 (PC Act) or is in violation of the principles herein mentioned or if there be a substantive suspicion in this regard, the Principal / Owner will inform the Chief Vigilance Officer and in addition can also initiate disciplinary actions as per its internal laid down policies and procedures.

Article 2: Commitment of the Bidder(s)/Contractor(s)

- (1). It is required that each Bidder / Contractor (including their respective officers, employees and agents) adhere to the highest ethical standards, and report to the IITB / Department all suspected acts of fraud or corruption or Coercion or Collusion of which it has knowledge or becomes aware, during the tendering process and throughout the negotiation or award of a contract.
- (2) The Bidder(s) / Contractor(s) commits himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the Tender process and during the Contract execution:
 - a. The Bidder(s)/Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal/Owner's employees involved in the Tender process or execution of the Contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the Tender process or during the execution of the Contract.
 - b. The Bidder(s)/Contractor(s) will not enter with other Bidder(s) into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to cartelize in the bidding process.

- c. The Bidder(s)/Contractor(s) will not commit any offence under the relevant IPC/PC Act. Further the Bidder(s) / Contract(s) will not use improperly, (for the purpose of competition or personal gain), or pass on to others, any information or documents provided by the Principal / Owner as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
 - d. The Bidder(s)/Contractor(s) of foreign origin shall disclose the names and addresses of agents/ representatives in India, if any. Similarly, Bidder(s) / Contractor(s) of Indian Nationality shall disclose names and addresses of foreign agents/representatives, if any. Either the Indian agent on behalf of the foreign principal or the foreign principal directly could bid in a tender but not both. Further, in cases where an agent participates in a tender on behalf of one manufacturer, he shall not be allowed to quote on behalf of another manufacturer along with the first manufacturer in a subsequent/parallel tender for the same item.
 - e. The Bidder(s)/Contractor(s) will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the Contract.
- (3). The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.
 - (4). The Bidder(s)/Contractor(s) will not, directly or through any other person or firm indulge in fraudulent practice means a wilful misrepresentation or omission of facts or submission of fake/forged documents in order to induce public official to act in reliance thereof, with the purpose of obtaining unjust advantage by or causing damage to justified interest of others and/or to influence the procurement process to the detriment of the Government interests.
 - (5). The Bidder(s)/Contractor(s) will not, directly or through any other person or firm use Coercive Practices (means the act of obtaining something, compelling an action or influencing a decision through intimidation, threat or the use of force directly or indirectly, where potential or actual injury may befall upon a person, his/ her reputation or property to influence their participation in the tendering process).

Article 3: Consequences of Breach

Without prejudice to any rights that may be available to the Principal/Owner under law or the Contract or its established policies and laid down procedures, the Principal/Owner shall have the following rights in case of breach of this Integrity Pact by the Bidder(s)/Contractor(s) and the Bidder/ Contractor accepts and undertakes to respect and uphold the Principal/Owner's absolute right:

- (1). If the Bidder(s) / Contractor(s), either before award or during execution of Contract has committed a transgression through a violation of Article 2 above or in any other form, such as to put his reliability or credibility in question, the Principal/Owner after giving 14 days' notice to the contractor shall have powers to disqualify the Bidder(s)/Contractor(s) from the Tender process or terminate/determine the Contract, if already executed or exclude the Bidder/Contractor from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of transgression and determined by the Principal/Owner. Such exclusion may be forever or for a limited period as decided by the Principal/Owner.
- (2). Forfeiture of EMD/Performance Guarantee/Security Deposit: If the Principal/Owner has

disqualified the Bidder(s) from the Tender process prior to the award of the Contract or terminated/determined the Contract or has accrued the right to terminate/determine the Contract according to Article 3(1), the Principal / Owner apart from exercising any legal rights that may have accrued to the Principal / Owner, may in its considered opinion forfeit the entire amount of Earnest Money Deposit, Performance Guarantee and Security Deposit of the Bidder/Contractor.

- (3). Criminal Liability: If the Principal/Owner obtains knowledge of conduct of a Bidder or Contractor, or of an employee or a representative or an associate of a Bidder or Contractor which constitutes corruption within the meaning of IPC Act, or if the Principal/Owner has substantive suspicion in this regard, the Principal/Owner will inform the same to law enforcing agencies for further investigation.

Article 4: Previous Transgression

- (1). The Bidder declares that no previous transgressions occurred in the last 5 years with any other Company in any country confirming to the anticorruption approach or with Central Government or State Government or any other Central/State Public Sector Enterprises in India that could justify his exclusion from the Tender process.
- (2). If the Bidder makes incorrect statement on this subject, he can be disqualified from the Tender process or action can be taken for banning of business dealings/ holiday listing of the Bidder/Contractor as deemed fit by the Principal / Owner.
- (3). If the Bidder / Contractor can prove that he has resorted / recouped the damage caused by him and has installed a suitable corruption prevention system, the Principal/Owner may, at its own discretion, revoke the exclusion prematurely.

Article 5: Equal Treatment of all Bidders/Contractors/Subcontractors

- (1). The Bidder(s)/Contractor(s) undertake(s) to demand from all subcontractors a commitment in conformity with this Integrity Pact. The Bidder/Contractor shall be responsible for any violation(s) of the principles laid down in this agreement / Pact by any of its Subcontractors / sub-vendors.
- (2). The Principal/Owner will enter into Pacts on identical terms as this one with all Bidders and Contractors.
- (3). The Principal/Owner will disqualify Bidders, who do not submit, the duly signed Pact between the Principal/ Owner and the bidder, along with the Tender or violate its provisions at any stage of the Tender process, from the Tender process.

Article 6- Duration of the Pact

This Pact begins when both the parties have legally signed it. It expires for the Contractor, 12 months after the completion of work under the Contract or till the continuation of defect liability period, whichever is more and for all other bidders, till the Contract has been awarded.

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

Article 7- Other Provisions

- (1). This Pact is subject to Indian Law, place of performance and jurisdiction is the Headquarters of the Division of the Principal/Owner, who has floated the Tender.
- (2). Changes and supplements need to be made in writing. Side agreements have not been made.
- (3). If the Contractor is a partnership or a consortium, this Pact must be signed by all the partners or by one or more partner holding power of attorney signed by all partners and consortium members. In case of a Company, the Pact must be signed by a representative duly authorized by board resolution.

- (4). Should one or several provisions of this Pact turn out to be invalid; the remainder of this Pact remains valid. In this case, the parties will strive to come to an agreement to their original intentions.
- (5). It is agreed term and condition that any dispute or difference arising between the parties with regard to the terms of this Integrity Agreement / Pact, any action taken by the Owner/Principal in accordance with this Integrity Agreement/ Pact or interpretation thereof shall not be subject to arbitration.

Article 8- Legal and Prior Rights

All rights and remedies of the parties hereto shall be in addition to all the other legal rights and remedies belonging to such parties under the Contract and/or law and the same shall be deemed to be cumulative and not alternative to such legal rights and remedies aforesaid. For the sake of brevity, both the Parties agree that this Integrity Pact will have precedence over the Tender/Contact documents with regard any of the provisions covered under this Integrity Pact.

IN WITNESS WHEREOF the parties have signed and executed this Integrity Pact at the place and date first above mentioned in the presence of following witnesses:

(For and on behalf of Principal / Owner)

.....

(For and on behalf of Bidder / Contractor)

WITNESSES:

1

(Signature, name and address)

2

(Signature, name
and address)

Place:

Dated :

11. PROFORMA OF SCHEDULES (COMBINED FOR MAJOR AND MINOR COMPONENTS) SCHEDULE "A" to "F"

SCHEDULE "A"

Percentage bid is as per **Part D1** and Schedule of Quantities as per **Part D2**

SCHEDULE "B"

Schedule of materials to be issued to the Contractor: NIL

SCHEDULE "C"

Tools and Plants to be hired to the Contractor: NIL

SCHEDULE "D"

Extra Schedule for specific requirements/ documents for the work, if any: NIL

SCHEDULE "E"

Reference to General Conditions of Contract:	Referred to PART-A2- Conditions of the Contract
Office inviting Tender:	SE (Estate Office), IITB, Mumbai-76.
Definitions:	
Superintending Engineer	SE (Estate Office), IITB, Mumbai-76.
2(viii) Accepting Authority:	SE (Estate Office), IITB, Mumbai-76.
2(x) Percentage on cost of materials and labour to cover all overheads and profits:	15%
2(xi) Standard Schedule of Rates:	Delhi Schedule Rates (DSR) 2023 for Civil and PHE Works. Delhi Schedule Rates, Analysis of Rates and specification (Horticulture & Landscape) 2020.
	Latest Delhi Schedule Rates (DSR) published by CPWD for E&M Works
2(xii) Institute:	INDIAN INSTITUTE OF TECHNOLOGY BOMBAY

Reference to General **Referred to PART-A2- Conditions of the Contract**

Conditions of Contract:

Name of Work:

Renovation of Auditorium, Conference Room, VIP Lounge for Civil, Electrical, Firefighting, BMS, HVAC to Victor Menezes Convention Centre (VMCC) at Indian

Institute of Technology Bombay, Powai, Mumbai –
400076.

Estimated Amount:	Referred to Article 1.1 of Part A
Earnest Money:	Referred to Article 1.1 of Part A
Performance Guarantee:	5% of tendered value
Security Deposit:	5% of tendered value

SCHEDULE “F”

9(ii) Standard Contract Form:	Generally, as per PART-A2- Conditions of the Contract
-------------------------------	---

CLAUSE 1:

- i. Time allowed for submission of Performance 15 days Guarantee, Programme Chart (Time and Progress) and applicable labour licenses, registration with EPFO, ESIC and BOCW Welfare Board or proof of applying thereof from the date of issue of letter of acceptance by IITB:

- ii. Maximum allowable extension beyond the period provided in (i) above:

CLAUSE 2:

Authority for fixing compensation DD
under Clause 2:

CLAUSE 2A: Deleted

Incentive for early completion:

CLAUSE 5:

Schedule of handing over of site reckoned from date of issue of work order 7 days with late fee @0.1% per day of the Performance Guarantee amount.

Not Applicable

Schedule of issue of designs:

Submission of Programme Chart (Time and Progress using PRIMAVERA within a period from the date of start 15 Days

Number of days from the date of issue of letter of acceptance / Work Order for **reckoning** date of start of the work 7 days after W.O

7 days

15 days or date of handing over of the site whichever is later

Milestones for completion of the Project shall be as per the table below:

Sr No	Description of Milestone (Physical)	Time allowed in months from date of start of the work	Amount to be withheld in case of non-achievement of mile stone (% of Tendered Amount)
1	Mobilization & Preparatory Works	0 to 15 days	15 %
2	Mock-up of classrooms	0 to 1.5 months	15 %
3	Civil & Interior Works	0 to 5 months	15 %
4	Firefighting Works	0 to 5 Months	15 %
5	BMS (Building Management System) Works	5 to 6 months	15 %
6	HVAC Works	6 to 8 months	15 %
7	Final Finishing & Integration	9 to 10 months	5%
8	Testing, Commissioning & Handover	11 to 12 months	5%

AUTHORITY TO DECIDE:

Extension of time: Superintending Engineer, Estate Office
Rescheduling of Milestones: Superintending Engineer, Estate Office

Shifting of date of start in case of delay in handing Superintending Engineer
(Estate Office) over of site:

CLAUSE 6, 6A:

Clause applicable (6 or 6A) 6A (only computerized MB)

CLAUSE 7:

Gross work to be done together with net payment / adjustment Rs. 200 lakhs
of advances for material collected, if any, since the last
such payment for being eligible to Interim payment (As per
discretion of Engineer-In-Charge)

CLAUSE 7A

Applicable licenses/ registrations or proof of applying for obtaining labour licenses,
registration with EPFO, ESIC and BOCW Welfare Board including Provident Fund Code
No. If applicable shall be submitted **within a period of 15 days** from issue of work
order.

CLAUSE 8A

Authority to decide compensation on account if Contractor fails to: Superintending
Engineer

Submit completion plans Compensation for failure in submission of completion plans for
Internal and External Civil, Electrical and Mechanical Services within thirty days of the
completion of the work is limited to 0.1% of the Tendered Price.

CLAUSE 10A

**a. List of minimum testing equipment to be provided by the Contractor at site lab
for Civil Works**

1. Cube testing machine (with Calibration)
2. Silt testing Jar
3. Sieve analysis – full set 4. Proctor density apparatus
5. Levelling instrument.
6. Oven 01 Number.
7. Cube mould-30 Nos.
8. Balance – 7 to 10 kg-1 No. and 500 gm capacity-1 No.
9. Vernier Calliper,

10. Measuring cylinder-2Nos,
11. Measuring tape 3-meter, 5-meter, 10-meter, 30 meter – 2 each.
12. Earth Merger,
13. Hipot-Testing Kit.
14. Phase sequence Metre
15. R-L-C Metre
16. Clip-on-metre for different rangers.

b. List of testing equipment to be provided by the Contractor at site lab for E&M Works:

1. Megger
2. Earth Tester
3. Lux meter
4. Wire Gauge
5. Micro meter
6. Vernier Callipers

This list is only indicative and not exhaustive. The bidders shall be required to provide any such testing equipment as required as per CPWD specifications/ item nomenclature as and when required on the site.

CLAUSE 10B (ii): (Mobilization advance)

Whether clause 10B (ii) shall be applicable: No

CLAUSE 10C: Not Applicable

Component of labour expressed as percent of value of work: Not applicable

CLAUSE 10CA:

Whether clause 10CA shall be applicable: Clause 10CA shall not be applicable and stands deleted

CLAUSE 10CC: NOT APPLICABLE

CLAUSE 11:

Specifications to be followed for execution of work:	As per CPWD Specifications for Civil and MEP works with up-to-date correction slips (Hereinafter termed as CPWD specifications).	
(Enclosed as an Attachment separately for Civil and E&M Works)	i.	For Civil Works: CPWD Specifications- 2019_VOL 01 (July 2019) and updates if any till submission of the Bid and CPWD Specifications- 2019_VOL 02 (July 2019) and updates if any till submission of the Bid. Particular Specifications / Manufacturer specifications and IS Standards for non-scheduled items of CPWD.
	ii.	And relevant IS codes of latest revisions

CLAUSE 12:

12.2,		Deviation Limit beyond which clauses 12.2, 12.3 & 12.4 of GCC shall apply for E&M Works	100% (One Hundred percent)
12.3 & 12.4			
12.5	i)	Deviation Limit beyond which clauses 12.2, 12.3 & 12.4 of GCC shall apply for substructure up to plinth level	100 % (One Hundred percent)
	ii)	Deviation Limit beyond which clauses 12.2, 12.3 & 12.4 of GCC shall apply for super structure.	100 % (One Hundred percent)

CLAUSE 16:

Competent Authority for deciding reduced rates. Superintending Engineer,
Estate Office

CLAUSE 17:

Defect liability period: 24 months from the date of completion certificate.

CLAUSE 18:

As minimum, list of mandatory machinery, tools & plants to be deployed by the Contractor at site: -

1. Double legged MS steel scaffolding for full facade

This list is indicative only and not exhaustive. The bidders shall be required to deploy any such Tools & Plants (T & P) as required as per the work requirements and Contract conditions.

The cost for the provisions is deemed included in the overall Tendered Amount and shall not be measured for payment."

CLAUSE 19:

Authority for applying Penalty for default under this Clause: Superintending Engineer, Estate

Office

Clause 19C - Rs 1000 per each default

Clause 19D - Rs 1000 per each default

Clause 19G - Rs 1000 per day for each default (max 5% of estimated cost put to tender)

Clause 19K - Rs 1000 per tradesman per day

CLAUSE 25:

Building Works Committee (BWC) of IITB shall act as Constitution of Dispute Resolution Committee (DRC) with co-opted Redressal Committee (DRC) additional members with legal and contract expertise in the committee by the Director IITB.

Place of Arbitration

Mumbai

CLAUSE 32 (ii):

Requirement of Technical Representative(s) and recovery Rate: -

Sl. No.	Minimum Qualification of Technical Representative	Discipline	Designation (Principal Technical / Technical Representative)	Minimum experience required	No.	Rate at which recovery shall be made from the Contractor in the event of not fulfilling provision of clause 32 (ii)	
						Figures (in Rs.)	Words
1	Project Manager with degree in Civil Engineering	Civil	Principle Technical Representative	10 Years (and having experience of one similar nature of work)	1no	1,00,000/-	Rupees One Lakh per Month
2	Graduate Engineer Or Diploma Engineer	Civil	Project / Site Engineer	5 or 10 Years respectively	1 No	50,000/-	Rupees Fifty Thousand only per Month

3	Graduate Engineer Or Diploma Engineer	Electrical	Project / Site Engineer	2 or 5 Years respectively	1 no.	40,000/-	Rupees Forty Thousand per month
4	Graduate Engineer Or Diploma Engineer	HVAC+/ MEP	Project / Site Engineer	2 or 5 Years respectively	1 no.	40,000/-	Rupees Forty Thousand per month
5	Degree in any discipline with minimum one year Advance diploma in industrial safety from RLI / CLI.	Safety	Safety Officer/Engineer cum Labour Officer	5 Years	1 no.	30,000/-	(Rupees Thirty Thousand only) per month

Note:

Assistant Engineers retired from Government services who are holding Diploma will be treated at par with Graduate Engineers. Diploma holder with minimum 10-year relevant experience with a reputed company can be treated at par with Graduate Engineers for the purpose of such deployment subject to the condition that such diploma holders should not exceed 50% of requirement of degree engineers.

12. STANDARD PROFORMAS

12.1 APPENDIX - XVI (Refer Clause 5)

FORM OF APPLICATION BY THE CONTRACTOR FOR SEEKING EXTENSION OF TIME

1. Name of Contractor
2. Name of work as given in the agreement
3. Agreement no
4. Estimated amount put tender
5. Date of commencement of work as per agreement
6. Period allowed for completion of work as per agreement.
7. Date of completion stipulated in agreement.
8. Period for which extension of time if has been given by authority in Schedule' F' previously.

Letter no. and date	Extension granted	
	Months	Days
(a) 1st extension		
(b) 2nd extension.....		
(c) 3rd extension		
(d) 4th extension		
(e) Total extension previously given		

9. Reasons for which extension have been previously given (copies of the previous applications should be attached)
10. Period for which extension if applied for
11. Hindrances on account of which extension is applied for with dates on which hindrances occurred and the period for which these are likely to last (for causes under clause 5.2 and 5.3).

Submitted to the Authority indicated in Schedule F With copy to the Engineer-in-charge.

Signature of the Contractor

.....

Dated

Part A-2 : Standard Proformas – Appendix XVII

12.2 APPENDIX - XVII Notice for appointment of Arbitrator.

[Refer Clause 25]

To

Director IITB

.....

.....

Subject: Reference of disputes and amount claimed for each dispute to the Conciliator for settlement of disputes relating to agreement number

Dear Sir,

In terms of clause 25 of the agreement, particulars of which are given below, I/we hereby give notice to you to appoint an arbitrator for settlement of disputes mentioned below:

1. Name of applicant
2. Whether applicant is Individual / Prop. Firm/Partnership Firm/Ltd. Co.
3. Full address of the applicant
4. Name of the work and Contract number in which arbitration sought
5. Name of the Authority which entered into Contract
6. Contract amount in the work
7. Date of Contract
8. Date of initiation of work
9. Stipulated date of completion of work
10. Actual date of completion of work (if completed)
11. Total number of claims made
12. Total amount claimed
13. Date of intimation of final bill (if work is completed)
14. Date of payment of final bill (if work is completed)
15. Amount of final bill (if work is completed)
16. Date of appeal to you
17. Date of receipt of your decision.

Yours Faithfully

Specimen signature s of the Applicant

(only the person/authority who signed the contract should sign)

I/We certify that the information given above is true to the best of my/ our knowledge. I/We enclose following documents.

1. We have exhausted provision of DRC as per clause 25 of this agreement.
2. Statement of claims with number of claims.

Copy in duplicate to:

Superintending Engineer (Estate Office) IITB / DD (FEA)

12.3. FORMATS OF GUARANTEE BONDS:

On non-judicial stamp paper of minimum Rs. 100

Guarantee offered by Bank to IITB in connection with the execution of Contracts

Form of Bank Guarantee for Performance Guarantee / Security Deposit / Mobilization Advance

1. Whereas the Superintending Engineer (Estate Office), Indian Institute of Technology Bombay (herein after called the Superintending Engineer (Estate Office)) on behalf of Indian Institute of Technology Bombay (herein after called the IITB) has invited bids under (NIT number) Dated for (name of work) IITB has further agreed to accept irrevocable Bank Guarantee for Rs. (Rupees only) valid up to (date)*.....as **Performance Guarantee / Security Deposit / Mobilization Advance**** from the said Contractor for compliance of his obligations in accordance with the terms and conditions of the agreement from (name and address of contractor) (hereinafter called “the Contractor”) for compliance of his obligations in accordance with the terms and conditions of the said NIT.
2. We, (indicate the name of the bank) (herein after referred to as “the Bank”), hereby undertake to pay to the IITB an amount not exceeding Rs. (Rupees..... only) on demand by the IITB within 10 days of the demand.
3. We,(indicate the name of the Bank)....., do here by undertake to pay the amount due and payable under this guarantee without any demur, merely on a demand from the IITB stating that the amount claimed is required to meet the recoveries due or likely to be due from the said Contractor. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this Guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. (Rupees only).
4. We, (indicate the name of the Bank), further undertake to pay the IITB any money so demanded notwithstanding any dispute or disputes raised by the Contractor in any suit or proceeding pending before any Court or Tribunal, our liability under this Bank Guarantee being absolute and unequivocal. The payment so made by us under this Bank Guarantee shall be a valid discharge of our liability for payment there under and the Contractor shall have no claim against us for making such payment.
5. We, (indicate the name of the Bank), further agree that the IITB shall have the fullest liberty without our consent and without affecting in any manner our obligation here under to vary any of the terms and conditions of the said agreement or to extend time of performance by the said Contractor from time to time or to postpone for any time or from time to time any of the powers exercisable by the IITB against the said Contractor and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation or extension being

granted to the said Contractor or for any forbearance, act of omission on the part of the IITB or any indulgence by the IITB to the said Contractor or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

6. We, (indicate the name of the Bank) , further agree that the IITB at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor at the first instance without proceeding against the Contractor and notwithstanding any security or other guarantee the IITB may have in relation to the Contractor's liabilities.
7. This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor.
8. We, (indicate the name of the Bank) , undertake not to revoke this guarantee except with the consent of the IITB in writing.
9. This Bank Guarantee shall be valid up to unless extended on demand by the IITB. Notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs. (Rupees only) and unless a claim in writing is lodged with us within the date of expiry or extended date of expiry of this guarantee, all our liabilities under this guarantee shall stand discharged.

Date

Witnesses:

- | | | |
|----|------------------|----------------------|
| 3. | Signature..... | Authorized signatory |
| | Name and address | Name |

Designation

- | | | |
|----|------------------|---------------|
| | | Staf Code no. |
| 4. | Signature | Bank seal |
| | Name and address | |

*Date to be worked out on the basis of validity period of 180 days from the date of submission of tender.

** strike out the portion not applicable. Bank Guarantee will be made either for performance guarantee or for security deposit / mobilization advance, as the case may be.

12.4 INDENTURE FOR SECURED ADVANCES - Appendix - XV

THIS INDENTURE made the..... day of20..... BETWEEN(Hereinafter called the Contractor which expression shall where the context so admits or implies be deemed to include his executors' administrators and assigns) of the one part and the Superintending Enginner, Estate Office (hereinafter called the President which expression shall where the context so admits or implies be deemed to include his successors in office and assigns) of the other part.

WHEREAS by an agreement dated (hereinafter called the said agreement) the Contractor has agreed AND WHEREAS the Contractor has applied to the Director, IITB that he may be allowed advances on the security of materials absolutely belonging to him and brought by him to the site of the works the subject of the said agreement for use in the construction of such of the works as he has undertaken to execute at rates fixed for the finished work (inclusive of the cost of materials and labour and other charges) AND WHEREAS the Director IITB has agreed to advance to the Contractor the sum of Rupees _____ on the security of materials the quantities and other particulars of which are detailed in Accounts of Secured Advances attached to the Running Account Bill for the said works signed by the Contractor on and the Director IITB has reserved to himself the option of making any further advance or advances on the security of other materials brought by the Contractor to the site of the said works. Now THIS INDENTURE WITNESSETH that in pursuance of the said agreement and in consideration of the sum of Rupees on or before the execution of these presents paid to the Contractor by the Director IITB (the receipt whereof the Contractor doth hereby acknowledge) and of such further advances (if any) as may be made to him as aforesaid the Contractor doth hereby covenant and agree with the Director IITB and declare as follows: -

- (1) That the said sum of Rupees _____ so advanced by the Director IITB to the Contractor as aforesaid and all or any further sum or sums advanced as aforesaid shall be employed by the Contractor in or towards expediting the execution of the said works and for no other purpose whatsoever.
- (2) That the materials detailed in the said Account of Secured Advances which have been offered to and accepted by the Director as security are absolutely the Contractor's own property and free from encumbrances of any kind and the Contractor will not make any application for or receive a further advance on the security of materials which are not absolutely his own property and free from encumbrances of any kind and the Contractor indemnifies the Director IITB against all claims to any materials in respect of which an advance has been made to him as aforesaid.
- (3) That the materials detailed in the said Account of Secured Advances and all other materials on the security of which any further advance or advances may hereafter be made as aforesaid (hereinafter called the said materials) shall be used by the Contractor solely in the execution of the said works in accordance with the directions of the Engineer in charge and in the term of the said agreement.
- (4) That the Contractor shall make at his own cost all necessary and adequate arrangements for the proper watch, safe custody and protection against all risks of the said materials and that until used in construction as aforesaid the said materials shall remain at the site of the said works in the Contractor's custody and on his own responsibility and shall at all times be open to inspection by the Engineer in charge authorised by him. In the event of the said materials or any part thereof being stolen, destroyed or damaged or becoming deteriorated in a greater degree than is due to reasonable use and wear thereof the Contractor will forthwith replace the same with other materials of like quality or repair and make good the same as required by the Engineer-in-Charge.

- (5) That the said materials shall not on any account be removed from the site of the said works except with the written permission of the Engineer in charge or an officer authorised by him on that behalf.
- (6) That the advances shall be repayable in full when or before the Contractor receives payment from the Director IITB of the price payable to him for the said works under the terms and provisions of the said agreement. Provided that if any intermediate payments are made to the Contractor on account of work done than on the occasion of each such payment the Director IITB will be at liberty to make a recovery from the Contractor's bill for such payment by deducting there from the value of the said materials then actually used in the construction and in respect of which recovery has not been made previously, the value for this purpose being determined in respect of each description of materials at the rates at which the amounts of the advances made under these presents were calculated.
- (7) That if the Contractor shall at any time make any default in the performance or observance in any respect of any of the terms and provisions of the said agreement or of these presents the total amount of the advance or advances that may still be owing to the Director IITB shall immediately on the happening of such default be repayable by the Contractor to the Director IITB together with interest thereon at 12% (twelve per cent) per annum from the date or respective dates of such advance or advances to the date of repayment and with all costs charges, damages and expenses incurred by the Director IITB in or for the recovery thereof or the enforcement of this security or otherwise by reason of the default of the Contractor and the Contractor hereby covenants and agrees with the Director IITB to repay and pay the same respectively to him accordingly.
- (8) That the Contractor hereby charges all the said materials with the repayment to the Director IITB of the said sum of Rupees _____ and any further sum or sums advanced as aforesaid and all costs charges, damages and expenses payable under these presents PROVIDED ALWAYS and it is hereby agreed and declared that notwithstanding anything in the said agreement and without prejudice to the powers contained therein if and whenever the covenant for payment and repayment herein before contained shall become enforceable and the money owing shall not be paid in accordance therewith the Director IITB may at any time thereafter adopt all or any of the following courses as he may deem best :-
- a. Size and utilize the said materials or any part thereof in the completion of the said works on behalf of the Contractor in accordance with the provisions in that behalf contained in the said agreement debiting the Contractor with the actual cost of effecting such completion and the amount due in respect of advances under these presents and crediting the Contractor with the value of work done as if he had carried it out in accordance with the said agreement and at the rates thereby provided. If the balance is against the Contractor, he is to pay same to the Director IITB on demand.
 - b. Remove and sell by public auction the seized materials or any part thereof and out of the moneys arising from the sale retain all the sums aforesaid repayable or payable to the Director IITB under these presents and pay over the surplus (if any) to the Contractor.
 - c. Deduct all or any part of the moneys owing out of the security deposit or any sum due to the Contractor under the said agreement.
- (9) That except in the event of such default on the part of the Contractor as aforesaid interest on the said advance shall not be payable.

(10) That in the event of any conflict between the provisions of these presents and the said agreement the provisions of these presents shall prevail and in the event of any dispute or difference arising over the construction or effect of these presents the settlement of which has not been herein before expressly provided for the same shall be finally resolved as per provisions of clause 25 of the contract.

In witness whereof the saidand by the order and under the direction of the Director IITB have hereunto set their respective hands the day and year first above written.

Signed, sealed and delivered by.....the said Contractor in the presence of

Signature

Witness Name

Address

Signed by.....

by the order and direction of the Director IITB in the presence of

Signature

Witness Name

Address

12.5 FORMS FOR GUARANTEE BONDS

i. GUARANTEE BOND FOR REMOVAL OF DEFECTS OF WATER PROOFING WORKS.

This Agreement made thisday of two thousand and.....

Between (Name of the Contractor, hereinafter called the Guarantor on the one part) and Director, Indian Institute of Bombay (hereinafter called the IITB on the other part).

WHEREAS this agreement is supplementary to a contract (hereinafter called the contract) dated and made between the GUARANTOR on the one part and the IITB on the other part for construction (Name of the work) where by the GUARANTOR, inter alia, undertook to render the buildings and structures in the said contract recited completely water and leak proof.

AND WHEREAS THE GUARANTOR agreed to give a guarantee to the effect that the said structures will remain water and leak proof for ten years from the date of completion of the work.

NOW THE GUARANTOR hereby guarantees that water proofing treatment given by him will render the structures completely leak proof and the minimum life of such water proofing treatment shall be **10 (ten) years** to be reckoned from the date of completion of the work as a whole.

Provided that the GUARANTOR will not be responsible for leakage caused by earthquake or structural defects or misuse of roof or alteration and for such purpose.

(a)Misuse of roof shall mean any operation which will damage water proofing treatment, like chopping of firewood and things of the same nature which might cause damage to the roof;

(b) Alteration shall mean construction of an additional storey or a part of the roof or construction adjoining to existing roof whereby water proofing treatment is removed in parts;

(c)The decision of the Engineer – in - Charge with regard to cause of leakage shall be final

During this period of guarantee, the GUARANTOR shall make good all defects and in case of any defects being found, render the building water-proof at his cost to the satisfaction of the Engineer – in– Charge / authorized representative of IITB, and shall commence the work for such rectification within seven days from the date of issue of the notice from Engineer – in – Charge / authorized representative of IITB calling upon him to rectify the defects, failing which the work shall be got done by IITB / IITB through some other Contractor at the GUARANTOR'S cost and risk. The decision of the Engineer – in – Charge / authorized representative of IITB as to the cost, payable by the Guarantor shall be final and binding.

That if the GUARANTOR fails to execute the necessary rectification of water proofing or commits breach there under, then the Guarantor will indemnify IITB and his successors against all loss, damage, cost expense or otherwise which may be incurred by him by reasons of any default on the part of GUARANTOR in performance and observance of this supplementary agreement. As to the amount of loss and / or damage and / or cost incurred by the IITB, the decision of the Engineer – in – Charge / IITB will be final and binding on the parties.

IN WITNESS WHEREOF these presents have been executed by the Obligator 1. Director. IITB and by and for and on behalf of the Director, IITB on the day, month and year first above written.

Signed, sealed and delivered by OBLIGATOR in the presence of:

1. _____ 2. _____

SIGNED FOR AND ON BEHALF OF DIRECTOR IITB by in the presence of:

1. _____ 2. _____

ii. GUARANTEE BOND FOR REMOVAL OF DEFECTS IN CURTAIN GLAZING & OTHER RELATED WORKS.

This Agreement made this _____ day of two thousand and _____ between _____ (Name of the Contractor, hereinafter called the Guarantor on the one part) and the Director, Indian Institute of Technology Bombay (hereinafter called the IITB on the other part).

WHEREAS this agreement is supplementary to a contract (hereinafter called the contract) dated _____ and made between the GUARANTOR on the one part and the IITB on the other part for Comprehensive interior upgradation and refurbishment of auditorium, seminar rooms, conference room, atrium and VIP lounge including civil furniture, PHE, MEP, HVAC and LMS works of Victor Menezes convention centre at IIT Bombay Powai, Mumbai – 400076. where by the GUARANTOR, interalia, undertook to carry out structural analysis and design, preparation of shop drawings, setting out, design, supply, fabrication, installation, aligning, fixing, protection and testing of the curtain glazing and other related works, all as specified and set out in the contract and as per the correct international / national standards.

AND WHEREAS THE GUARANTOR agreed to give a guarantee (for all works as stated above) for the following:

1. System

- a. Structural design has been carried out for design loads, as specified, thermal stresses, building movements and the consequent deflections without compromising the performance characteristics.
- b. That deflections in the framing members shall be within permissible limits as specified.
- c. Structural stability, safety, integrity and required performances of the work for all design works and building movements as specified.

2. Material

- a. Glass (single, laminated or DGUs) – Substrate, coatings, lamination of laminated glass, insulation of DGUs
- b. Sealant – Material used, performance of sealant used, usage as per the requirement of structural design and functional requirement, compatibility with different substance and sealants, bite size, quality assurance during sealing of DGUs and fixing glass to glass and glass to the aluminium frame, etc.
- c. EPDM / Silicone gaskets – for ozone resistance and other properties as specified etc.
- d. Aluminium – material quality, tempering requirement, suitability of aluminium grade and anodizing etc.
- e. Anchor fasteners – suitability and strength requirements as per manufacturers' specifications etc.

3. Performance

- a. Water tightness, wherever specified in the Contract.
- b. Workmanship
- c. Integrity of system during movements within and relative to the building structure.
- d. Indemnify the IITB against all claims of whatsoever nature due to defective designing by the Contractor, material & workmanship etc. and /or non-performance of the work during the guarantee period.

NOW THE GUARANTOR hereby guarantees that the work executed by him shall perform to the specified standards of quality and workmanship during the guarantee period of **10 (ten) years** to be reckoned from the date of completion of the work.

During this period of guarantee, the guarantor shall make good all defects and if any defect is noticed during the guarantee period, it shall be rectified by the Contractor within seven days of issue of notice to the Contractor, at least temporarily, to the satisfaction of the Superintending Engineer (Estate Office) , till the permanent rectification of the defects / replacement of defective materials is carried out by the Contractor, in maximum four months period, retaining same aesthetic and other functional parameters of the original work. If not attended to, the same shall be got done by the IITB / IITB through other agency at the risk and cost of the Contractor which shall be final and binding on the Contractor.

That if the Guarantor fails to execute the necessary rectification or commits breach there under, then the Guarantor will indemnify IITB and his successors against all loss, damage, cost expense or otherwise which may be incurred by him by reasons of any default on the part of GUARANTOR in performance and observance of this supplementary agreement. As to the amount of loss and / or damage and / or cost incurred by IITB, the decision of the Superintending Engineer (Estate Office) will be final and binding on the parties.

IN WITNESS WHERE OF these presents has been executed by the OBLIGATOR

and

by

and for and on behalf of Director. IITB. on the day month and year first above written.

SIGNED, SEALED AND DELIVERED by OBLIGATOR in the presence of:

- 1.
- 2.

SIGNED FOR AND ON BEHALF OF DIRECTOR. IITB. BY in the presence of:

- 1.
- 2.

iii. **GUARANTEE BOND FOR STRUCTURAL STEEL WORKS**

This Agreement made this _____ day of _____ two thousand and _____ between _____ (Name of the Contractor/Sub-Agency, hereinafter called the "Guarantor" on the one part) and the Director, Indian Institute of Technology Bombay (hereinafter called the "IITB" on the other part).

WHEREAS this agreement is supplementary to a contract (hereinafter called the "Contract") dated _____ and made between the Guarantor on the one part and IITB on the other part for Comprehensive interior upgradation and refurbishment of auditorium, seminar rooms, conference room, atrium and VIP lounge including civil furniture, PHE, MEP, HVAC and LMS works of Victor Menezes convention centre at IIT Bombay Powai, Mumbai – 400076 whereby the Guarantor, inter alia, undertook the supply, fabrication, installation, testing, commissioning, alignment, fixing, and protection of Structural Steel works as specified and set out in the Contract, and in accordance with international / national standards.

AND WHEREAS the Guarantor agreed to provide a Guarantee for the works mentioned, covering both the **performance** and **corrosion** of the systems as described below:

1. Defect Liability Period (DLP) – 24 Months:

a. System Performance

The supply, installation, testing, and commissioning of the Fume Hoods, Lab Furniture, related control systems, and associated MEP services have been carried out in compliance with the given design requirements, specified loads, safety standards, and operational performance criteria, including compliance with ASHRAE, EN/IS, and SEFA certifications.

b. Functionality

The equipment shall maintain specified performance levels, including airflow efficiency, face velocity, ventilation, and operational safety standards as tested and verified per ASHRAE and SEFA guidelines, for a Defect Liability Period of 24 months from the certified date of completion.

c. Safety

The system shall operate safely under all prescribed conditions, including emergency stops, sash operations, exhaust functioning, and fire protection systems during this 24-month period.

d. Indemnification

The Guarantor shall indemnify IITB against all claims of whatsoever nature arising from faulty installation, material, or workmanship and non-performance of the work during the 24-month Defect Liability Period.

2. Extended Guarantee Against Corrosion and Structural Integrity for period of 7 Years from the certified completion date of the Project: a. Corrosion Resistance

The Guarantor hereby guarantees that the Lab Furniture, Fume Hoods, Exhaust Systems, and other related components shall be free from any defects related to corrosion for a period of **7 years**, inclusive of the initial 24-month period, from the **certified completion date of the Project**

b. Corrosion Rectification

If any corrosion-related defects are found within this 7-year period, the Guarantor shall rectify such defects at no cost to IITB. The Guarantor must respond within seven days of receiving a notice of defect, with temporary rectification (to the satisfaction of the Superintending Engineer) provided if necessary. Permanent solutions shall be provided

within a maximum of one month, maintaining the original functionality, performance quality, and aesthetics of the work.

3. Rectification and Indemnification:

During the guarantee period, the Guarantor shall rectify any defects at no cost to IITB. In case the Guarantor fail to address the necessary rectifications or breach of this bond, they shall indemnify IITB against any loss, damage, cost, or expense incurred due to the default. The decision of the Superintending Engineer (Estate Office) regarding the amount of such loss or damage shall be final and binding on the Contractor.

4. Validity of the Guarantee:

This Guarantee Bond shall remain valid for a total period of 7 years from the certified date of completion of the works, covering both the 24-month Defect Liability Period for performance and the extended corrosion guarantee.

IN WITNESS WHEREOF, these presents have been executed by the Guarantor and for and on behalf of the Director, IITB, on the day, month, and year first above written.

SIGNED, SEALED, AND DELIVERED by the Guarantor in the presence of:

- 1. _____
- 2. _____

SIGNED FOR AND ON BEHALF OF THE DIRECTOR, IITB BY

- 1. _____
- 2. _____

12.6 FORM OF AGREEMENT

ARTICLES OF AGREEMENT made this Day of

BETWEEN

Superintending Engineer (Estate Office), Indian Institute of Technology Bombay, Powai, Mumbai-400 076 (hereinafter referred to as "the Employer" which expression shall include its successors and designs where the context so admits) of the one point.

AND

M/s.....(herein after referred to as "the Contractor" which expression shall include their heirs, executors, administrators and designs where the context so admits) of the other part.

WHEREAS

The employer is desirous that certain works should be executed, viz "Comprehensive interior upgradation and refurbishment of auditorium, seminar rooms, conference room, atrium and VIP lounge including civil furniture, PHE, MEP, HVAC and LMS works of Victor Menezes convention centre at IIT Bombay Powai, Mumbai – 400076." and has accepted Tender by the Contractor for the execution completion and maintenance of such works Now THIS AGREEMENT WITNESS are as follows: -

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to.
2. The following documents shall be deemed to form and be read and constructed as part of this Agreement, viz:-
 - a) Work order No. EO/A/ACAD/WKS-278/25-26 dated..... Along with the correspondence.
 - b) Conditions of the Contract.
 - c) Technical Specifications of Civil works.
 - d) Technical Specifications of Services.
 - e) Financial Bid-Bill of Quantities
 - f) Drawings
 - g) Prebid queries and responses
3. In consideration of the payments to be made by the Employer to the Contractor as herein after mentioned the Contractor hereby covenants with the Employer to execute, complete and maintain the works in conformity in all respects with the provisions of Contract.
4. The Employer hereby covenants to pay the Contractor in consideration of the execution and maintenance of the works at the Contract price at the time and in the manner prescribed by the Contract.
5. The particulars referred to in the various clauses of the Conditions of the Contract are as given in Schedules A to F.

IN WITNESS whereof the parties hereto have caused of their respective Common Seals to be here into affixed (or have hereinto set their respective hands and seals) the day and year first above written.

For and on behalf Director, IIT Bombay
Superintending Engineer (Estate Office)

In the Presence of:- 1. _____ 2. _____

For and on behalf Contractor,

In the Presence of:- 1. _____ 2. _____

PART B:
MAJOR COMPONENTS (CIVIL & PLUMBING WORKS)

1 SPECIFICATIONS

Referred to Clause 11 of the 'Clauses of the Contract' under GCC and to the Proforma of Schedules A to F.

2

ADDITIONAL / PARTICULAR SPECIFICATIONS FOR CIVIL WORKS:

Enclosed as an Attachment to Part B-2

3**LIST OF APPROVED MANUFACTURERS / MATERIALS FOR CIVIL AND PLUMBING WORKS:**

Note:

1. The Contractor shall obtain prior approval from the Superintending Engineer (Estate Office) before placing order for any specific material or engaging any of the specialized agencies. The Contractor shall make a detailed submittal with catalogues and highlighted proposed specifications, as well as full details of the works proposed to be executed by the specialized agency, as specified.
2. Wherever applicable, the Superintending Engineer (Estate Office) may approve any material equivalent to that specified in the tender subject to proof being offered by the Contractor for equivalence to his satisfaction.
3. Unless otherwise specified, the brand / make of the material as specified in the item nomenclature, in the particular specifications and in the list of approved materials attached in the tender, shall be used in the work.
4. Reinforcement steel shall be procured from any vendors who have the license for at least 5 years for manufacture of BIS subject to prior written approval of Superintending Engineer (Estate Office).
Steel sample of all the lots procured shall be subjected to testing through recognized laboratories and shall be at Contractors' cost. Sampling shall be as per the Specifications (referred to Schedule F).

A. CIVIL AND PLUMBING WORKS:

Sr. No.	Description of work	Manufacturers
I	Structural & Architectural	
1	Cement	ACC, Ultra Tech, J. P. Rewa, Vikram, Shree Cement, Birla Jute, Cement Corporation of India, Ambuja Cement
2	White Cement/ Putty	J.K., Birla
3	Ready Mix Concrete	A.C.C., Ultra Tech, RMC, Godrej, Skyway,
4	Waterproofing Compound	Pidilite, Basf, Cico, Fosroc, Roff, Sunanda, Sika
5	Reinforcement Steel	Sail, Tata Steel, Rinl, Jindal Steel & Power Ltd., Jsw Steel Ltd., Makes Conforming To Criteria Mentioned In Tender Document
6	Mechanical Splicing System with Coupler	Splicetek India Pvt. Ltd. Dextra India Pvt. Ltd. Ishita Enterprises
7	Structural Steel	Tata Steel, Sail, Rinl, Vizag, Jindal, Apl Apollo
8	Concrete Blocks	Conwood, Gurjari, Hindustan, Lokgroup, Sai Block, Ved Pmc Ltd.
9	AAC Blocks	Aerocon, Siporex, Ultra Tech, Ecolite, Godrej
10	Sand	Gujarat River
11	Precast Concrete Products	Siporex Ind, B.G. Shirke & Co; Supreme Concrete Minato Blocks - Kolhapur
12	Factory Made Concrete Blocks	Astra Concrete, Raj Cover Blocks
13	Ready Mixed Cement Plaster	Walplast, Ultra Tech, Madras Cement Ltd, Sound Build Care Ltd., Ferrouscrete,

Part B: Major Component (Civil) - List of Approved Materials –Civil & Plumbing Works

Sr. No.	Description of work	Manufacturers
		Precise Conchem Pvt Ltd.
14	Paver Blocks/ Grass Pavers/ Kerbstone	Vyara, Basant Betons, Super, Hindustan, H.R.Johnson, Pavit
15	External Paver Tiles	H.R. Johnson-Endura, Vyara, Super, Pavit, Kajaria
16	Epoxy Grout	Pidilite, Fosroc
17	External Texture Paint	Renovo, Ruff & Tuff, Roughtex, Sherwin Williams, Asian, Nitco, Dulux
18	Waterproofing Cement Paint	Snowcem, Berger, Nerolac, Asian, Pidilite
19	Paints	ICI, Asian, Berger, Nerolac, Dulux, Godavari Paints
20	Gypsum Light Weight Plaster	Gyproc, Ferrouscrete, Ultratech, Saint Gobain
21	White Cement Based Putty for Concrete/Plastered Surfaces	Birla White, Plasto Shine, Walplast Products Pvt. Ltd.
22	Polymer Modified Cementitious Grout/Cement Adhesive/Epoxy Grout	Pidilite, BASF, Cico, Fosroc, Roff, Laticrete, Ardex Endura
23	Polymer Modified Adhesive Mortar for AAC Blocks	Walplast, Ultra Tech, Madras Cement Ltd, Sound Build Care Ltd., Ferrouscrete, Precise Conchem Pvt Ltd., Keracol, Pidilite
24	Integral Water Proofing Compound	Pidilite, Roff, Fosroc, Sunanda, Cico, Accoproof, Mc Bauchemie, Sika
27	Floor Springs, Door Closures, Panic Bar, Patch Fittings	Dorma, Geze, Hafele, Hettich, Horman, Sevax, Casma
28	Screws	Nettlefold, Brass Oxide
30	Non Shrink Cementitious Grout	Sika, Fosroc, BASF, Pidilite
31	Hydrophilic Swellable Water Bar Profile Sealants	Sika, BASF, Adeka India
32	Polymer Modified Cementitious Grout / Cement Adhesive / Epoxy Grout	Pidilite, Keracol, Ardex Endura, Laticrete, Bal Endura, Ferrouscrete
33	All Types of Silicon	Dow Corning, GE, Wacker India
34	EPDM	Ame Rubber Industries, Okaska
35	Nuts, Bolts, Screws	Kundan, Puja, Atul
36	Welding Rods	Ador, Cosmos, Esab, Super Bond (S)
37	Stainless Steel Anchor Fasteners	Hilti, Fischer, Klimas
38	Aluminium Extrusion Sections	Jindal, Hindalco, Nalco, Indian Aluminium Co, Vedanta, Gujrat Aluminium
39	Intumescent Strips	Promat, Pemko, Intumex, Astroflame

Part B: Major Component (Civil) - List of Approved Materials –Civil & Plumbing Works

40	Float Glass Clear	Pilkington, Saint Gobain, Asahi, Modiguard, Guardian, Sisecam
41	Toughened Glass	
42	Dgu, Sgu, Fire Rated Glass	
43	Polymer primer	Aqua Alliance, Sunanda, Fosroc
44	Polymer modified mortar	Pidilie, Fosroc, Sika, Sunanda
45	Automatic Sliding door	Geze, Dorma, Hafele, Ozone
46	Aluminium composite panels	Reynobond, Aludecor, Alucobond

II Specialised Agencies:

Sr. No.	Description of work	Manufacturers
1	Waterproofing Works	Sika, Fosroc, Sunanda, Pidilite, Nayak Constructions Ltd, BASF, Keracol, Likproof India Pvt. Ltd., Modern Waterproofing Co, India Waterproofing Co., Overseas Waterproofing Corp. Keracol, Nina Waterproofing, National Water Proofing
2	Integral Water Proofing Compound	Pidilite, Roff, Fosroc, Sunanda, Cico, Accoproof, Mc Bauchemie, Sika, Kemper
3	Aluminium Roofing	Kalzip

Part B: Tender Drawings

4. TENDER DRAWINGS:

**i. -Enclosed as an Attachment to Part
B-4.**

Part C: Minor Components

Part D: Commercial Bid

PART D: COMMERCIAL BID

D.1: Percentage on Tendered amount

D.2: Bill of Quantities (composite works)