

भाट, इंदिरा पुल के पास, गांधीनगर - 382 428 Bhat, Nr. Indira Bridge, Gandhinagar – 382 428 GUJARAT (INDIA)

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निविदा दस्तावेज़ (दो भाग) TENDER DOCUMENT (Two Part)

(एक मुश्त निविदा दस्तावेज़) (Lump sum Tender Document)

भाग-I तकनीकी बोली Part-I Technical Bid

ई-निविदा सूचना सं.: IPR/TN/CIVIL-PR/06/2023 E-Tender Notice No.: IPR/TN/CIVIL-PR/06/2023

कार्य का नाम: Name of Work:

आईपीआर कैंपस, प्लाज़्मा अनुसंधान संस्थान, भाट, गांधीनगर -382428, गुजरात में वर्कशॉप फैसिलिटी के विस्तार (वर्कशॉप फैब्रिकेशन यार्ड का विस्तार) के लिए शेड बिल्डिंग के निर्माण का डिजाइन, निर्माण और हस्तांतरण, के आधार पर डिजाइनिंग सिहत वैधानिक अनुमित प्राप्त करना, सुविधा के उपयोग हेतु निर्माण करना एवं प्लाज़्मा अनुसंधान संस्थान (आईपीआर) को सुपूर्द करना।

Construction of Shed Building for Augmentation of Workshop facility (Extension of Workshop Fabrication yard) at IPR campus, Institute for Plasma Research, Bhat, Gandhinagar - 382428, Gujarat on Design, Build and Transfer Basis including Designing, obtaining Statutory permissions, Construction (Build) to make facility for use and Transfer to Institute for Plasma Research (IPR).

निविदा आमंत्रित करने वाले : डीन (प्रशासन),

प्राधिकारी का नाम और पता: प्लाज़्मा अनुसंधान संस्थान (IPR)

इंदिरा पुल के पास, भाट गांधीनगर-382428

Name and Address of

Tender Inviting Authority: Dean (Admin),

Institute for Plasma Research (IPR),

Near Indira Bridge, Bhat, Gandhinagar-382428

नोट: इस दस्तावेज़ के अंग्रेजी तथा हिंदी संस्करण में किसी भी विसंगति के मामले में अंग्रेजी संस्करण प्रबल रहेगा। NOTE: In case of any discrepancy between English and Hindi version, English version shall prevail.

Construction of Shed Building for Augmentation of Workshop facility (Extension of Workshop Fabrication yard) at IPR campus. Page 1 of 165

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36 Material IS codes Annexure-III 37 Annexures - Line Sketch Drawings Sr. No. 1 to 6 and Electrical Load 159-165		Declaration by the Bidder	
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भाट, इंदिरा पुल के पास, गांधीनगर - 382 428 Bhat, Nr Indira Bridge, Gandhinagar – 382 428 गुजरात (भारत) GUJARAT (INDIA)

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Tender Notice

निम्नलिखित दोनों कार्य के लिए **ई-निविदा** माध्यम से योग्य बोलीकर्ताओं से दो भागों में ऑनलाइन निविदाएं आमंत्रित की जा रही हैं।

Online tenders are invited in **Two parts** THROUGH e-tendering mode from and eligible bidders for the following work.

10110	wing work.	
1	कार्य का नाम:	TENDER NOTICE NO: IPR/TN/CIVIL-PR/06/2023 आईपीआर कैंपस, प्लाज़्मा अनुसंधान संस्थान, भाट, गांधीनगर -382428, गुजरात में वर्कशॉप फैसिलिटी के विस्तार (वर्कशॉप फैब्रिकेशन यार्ड का विस्तार) के लिए शेड बिल्डिंग के निर्माण का डिजाइन, निर्माण और हस्तांतरण, के आधार पर डिजाइनिंग सहित वैधानिक अनुमित प्राप्त करना, सुविधा के उपयोग हेतु निर्माण करना एवं प्लाज़्मा अनुसंधान संस्थान (आईपीआर) को सुपुर्द करना।
	Name of Work	Construction of Shed Building for Augmentation of Workshop facility (Extension of Workshop Fabrication yard) at IPR campus, Institute for Plasma Research, Bhat, Gandhinagar -382428, Gujarat on Design, Build and Transfer Basis including Designing, obtaining Statutory permissions, Construction (Build) to make facility for use and Transfer to Institute for Plasma Research (IPR).

उपरुक्त दोनों कार्यों के लिए निविदा दस्तावेज विस्तृत निविदा सूचना के साथ https://eprocure.gov.in/eprocure/app पर निशुल्क देखेने तथा डाउनलोड करने के लिए उपलब्ध है।

Detailed tender notice and Tender Document for the respective work is available on website https://eprocure.gov.in/eprocure/app for free view and downloading.

इस निविदा सूचना की प्रति देखने के लिए संस्थान की वेबसाईट पर भी उपलब्ध है। A copy of this tender notice is also available on the Institute's website for viewing only http://www.ipr.res.in/documents/tenders.html

support.civiltenders@ipr.res.in

ई-निविदा और ऑनलाइन जमा करने संबंधी जानकारी एवं निर्देश INFORMATION AND INSTRUCTIONS FOR e-TENDERING AND ONLINE SUBMISSION

Instructions for Online Bid Submission

(Department User may attach this Document as an Annexure in their Tender Document which provides complete Instructions for on line Bid submission for Bidders)

The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.

More information useful for submitting online bids on the CPP Portal may be obtained at: https://eprocure.gov.in/eprocure/app.

REGISTRATION

- Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: https://eprocure.gov.in/eprocure/app) by clicking on the link "Online bidder Enrollment" on the CPP Portal which is free of charge.
- 2) As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- 3) Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
- 4) Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / nCode / eMudhra etc.), with their profile.
- 5) Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead to misuse.
- 6) Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / e-Token.

SEARCHING FOR TENDER DOCUMENTS

- 1) There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, Organization Name, Location, Date, Value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as Organization Name, Form of Contract, Location, Date, Other keywords etc. to search for a tender published on the CPP Portal.
- 2) Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective 'My Tenders' folder. This would enable the CPP Portal to intimate the bidders through SMS / email in case there is any corrigendum issued to the tender document.
- 3) The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

PREPARATION OF BIDS

- 1) Bidder should take into account any corrigendum published on the tender document before submitting their bids.
- 2) Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
- 3) Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / RAR / DWF/JPG formats. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.
- 4) To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Space" or "Other Important Documents" area available to them to upload such documents. These documents may be directly submitted from the "My Space" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

Note: My Documents space is only a repository given to the Bidders to ease the uploading process. If Bidder has uploaded his Documents in My Documents space, this does not automatically ensure these Documents being part of Technical Bid.

SUBMISSION OF BIDS

- Bidder should log into the site well in advance for bid submission so that they can upload
 the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any
 delay due to other issues.
- 2) The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- 3) Bidder has to select the payment option as "offline" to pay the tender fee / EMD as applicable and enter details of the instrument.
- 4) Bidder should prepare the EMD as per the instructions specified in the tender document. The original should be posted/couriered/given in person to the concerned official, latest by the last date of bid submission or as specified in the tender documents. The details of the DD/any other accepted instrument, physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise the uploaded bid will be rejected.
- 5) Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BoQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BoQ file, open it and complete the white coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BoQ file is found to be modified by the bidder, the bid will be rejected.

- 6) The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
- 7) All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid opener's public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 7) The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 8) Upon the successful and timely submission of bids (i.e. after Clicking "Freeze Bid Submission" in the portal), the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
- 9) The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings.

ASSISTANCE TO BIDDERS

- 1) Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.
- 2) Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk.

Additional Notes:

- 1. Bids shall be submitted online only at CPP Portal website: https://eprocure.gov.in/eprocure/app
- 2. The agency shall download the pre bid clarification if any for the work and upload the same (scanned copy) duly signed and sealed. The revised documents (if any) shall be uploaded in e tender portal.
- 3. Tenderers are advised to upload their documents well in advance, to avoid last minutes rush on the server or complications in uploading. Institute for Plasma Research, in any case, shall not be held responsible for any type of difficulties during uploading the documents including server and technical problems whatsoever.
- 4. Submission of the tender documents after the due date and time (including extended Period) shall not be permitted.
- 5. Intending Bidders are advised to visit this website regularly till closing date of submission to keep themselves updated as any change/ modification in the tender will be intimated through this website only by corrigendum / addendum/ amendment.
- 6. Institute reserves the right to accept or reject the tender(s) in full or in part, without assigning any reason thereof. Tenders with any conditions including conditional rebate shall be rejected forthwith.

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INSTRUCTIONS TO BIDDERS REGARDING PROVISIONS OF MAKE IN INDIA.

The bidder shall submit their quoted bid in compliance with the following provisions for Make in India.

1. MAKE IN INDIA

- i. As defined under the Public Procurement (Preference to Make in India), order 2017, Revised orderdated: 16/09/2020 or as being revised from time to time, in procurement of goods or services in respect of which the Nodal Ministry/Department has communicated, that there is sufficient local capacity and local competition, only "Class-I local supplier", as defined under the said order, shall be eligible to bid irrespective of purchase value.
- ii. Only "Class-I local supplier" and "Class-II local supplier", as defined under the above said order, shall be eligible to bid in procurements under taken by this Institute, except where the mode of procurement is by issue of Global Tender Enquiry. The bidding supplier shall indicate the percentage of local content for the item being offered in their bid.
- iii. Where the procurement is by issue of Global Tender enquiry, Non local suppliers, shall also be eligible to bid along with "Class-I local suppliers and Class-II local suppliers". Suppliers/bidders offering imported products will fall under the category of Non-local suppliers.
- iv. Subject to the provisions of the above said order, and to any specific instructions issued by the Nodal Ministry or in pursuance of the said order, purchase preference shall be given to "Class-I local Suppliers" in procurements under taken by this Institute, in the manner specified there in the order.
- v. The bidders along with their bid/tender shall be required to provide a self-declaration certificate of the local content (where the procurement value is Rs.10 Crore or less) for the item offered and their status as Class-I/Class-II/Non-Local supplier and their eligibility to participate in the tender. In cases of procurement for a value in excess of Rs.10 crores, the "Class-I local supplier'/'Class-II local supplier' shall be required to provide a certificate from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of Contractors other than companies) giving the percentage of local content.
- vi. Self-declaration certificate should quantify the percentage of local content of the offered product only. It should also indicate the location. However, claiming the services such as transportation, insurance, installation & commissioning, training and after sale service support like AMC/CMC etc., shall not be considered as local content as per OM N.P-45021/102/2019-BE-II-Part(1)(E- 50310) dated:4/03/2021 issued by Ministry of Commerce and Industry, DPIIT.
- vii. False declarations/violation of this order terms shall be deemed to be breach of code of integrity resulting in debarment of the firm for a period up to 2 years. Under such circumstances, the supplier shall not be considered for any preferences as proposed in the order.
- viii. Wherever the bids are received without accompanying the above said requisite certificate such offers shall be treated as incomplete and not considered.

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- ix. Bidders/contractor are divided into three categories based on Local Content (The total value of the item procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties) as a proportion of the total value, in percent):
 - 1. Class-I local supplier is with local content equal to or more than as prescribed by the NodalMinistry/ NIT, if prescribed, for the item being procured or 50% whichever is higher.
 - 2. Class-II Local supplier is with local content equal to or more than as prescribed by the Nodal Ministry/NIT, if prescribed, for the item being procured or 20% whichever is higher, but less than that applicable for class-I local supplier.
 - 3. Non-local supplier is with local content less than that applicable to class-II local supplier, as stated above.

Note: Where the estimated value of the procurement is less than Rs.5 Lakhs (or as being amended by the competent authority from time to time) is exempted from the provisions of the above Make in India policy as stated therein the order.

Self-certification under preference to "Make in India" order as per Annexure-I should be uploaded on e-tender portal along with other documents.

2. ELIGIBILITY OF BIDDERS FROM SPECIFIED COUNTRIES:

- i. Orders issued by the Government of India restricting procurement from bidders of certain countries which shares a land border with India shall apply to this procurement.
- ii. Any bidder from a country which shares a land border with India (https://mea.gov.in/india-and-neighnours.htm), excluding countries as listed in the website of Ministry of External Affairs (https://meadashbaord.gov.in/indicators/92), to which the Government of India has extended lines of credit or in which the Government of India is engaged in development projects hereinafter called "Restricted countries') shall be eligible to bid in this tender only if the bidder is registered (https://dipp.gov.in/sites/default/files/Revised-Application-Format-for-Registration-of-Bidders-15Oct2020.pdf) with the Registration committee constituted by the Department for promotion of Industry and Internal Trade(DPIIT). The bidders shall enclose valid registration certificate along with their offer. Wherever the bids are received without accompanying the above said requisite certificate such offers shall be treated as incomplete and not considered.

Self-certification under <u>ELIGIBILITY DECLARATIONS FROM SPECIFIED</u> <u>COUNTRIES</u> order as per <u>Annexure-II</u> should be uploaded on e-tender portal along with other documents.

(I) Detailed Tender Notice Inviting Tender (NIT) निविदा आमंत्रण सूचना (एनआईटी) की विस्तृत निविदा

1	एनआईटी न. NIT No.	IPR/TN/CIVIL-PR/06/2023
2	कार्य का नाम Name of work	आईपीआर कैंपस, प्लाज़्मा अनुसंधान संस्थान, भाट, गांधीनगर - 382428, गुजरात में वर्कशॉप फैसिलिटी के विस्तार (वर्कशॉप फैब्रिकेशन यार्ड का विस्तार) के लिए शेड बिल्डिंग के निर्माण का डिजाइन, निर्माण और हस्तांतरण, के आधार पर डिजाइनिंग सहित वैधानिक अनुमित प्राप्त करना, सुविधा के उपयोग हेतु निर्माण करना एवं प्लाज़्मा अनुसंधान संस्थान (आईपीआर) को सुपुर्द करना।
		Construction of Shed Building for Augmentation of Workshop facility (Extension of Workshop Fabrication yard) at IPR campus, Institute for Plasma Research, Bhat, Gandhinagar-382428, Gujarat on Design, Build and Transfer Basis including Designing, obtaining Statutory permissions, Construction (Build) to make facility for use and Transfer to Institute for Plasma Research (IPR).
3	परियोजना की अनुमानित कुल लागत (डिज़ाइन करना, वैधानिक क अनुमति प्राप्त करना, सभी उपयोगी सामग्रियों के साथ निर्माण कार्य) Estimated Total Cost of Project (Design, Obtaining statutory permissions and Construction works (Build) including all utilities)	3.08 करोड रुपये (अनुमानित) Rs. 3.08 Crore (Approx.)

4	बयाना राशि (EMD)	रु. 6,16,000/- की ईएमडी बीमा ज़मानत बांड /डिमांड ड्राफ्ट / पे ऑर्डर / सावधि जमा रसीद के रूप में अनुसूची बैंकों द्वारा प्लाज्मा अनुसंधान संस्थान, भाट, गांधीनगर – 382428 के पक्ष में जमा की जानी है।नोट: i) चेक के रूप में ईएमडी स्वीकार नहीं की जाएगी।
	Earnest Money Deposit (EMD)	ईएमडी दस्तावेजों की स्कैन कॉपी अपलोड करने के बाद ही बोली जमा की जा सकती है और बोली जमा करने की अवधि के भीतर मूल ई-निविदा अधिकारी के कार्यालय में जमा की जानी चाहिए। बोली अपेक्षित ईएमडी के बिना प्राप्त बोलियों को सरसरी तौर पर खारिज
		कर दिया जाएगा। EMD of Rs.6,16,000/- to be submitted in the form of Insurance Surety Bond/Demand Draft / Pay order / Fixed Deposit Receipt by Schedule banks in favour of Institute for Plasma Research, Bhat, Gandhinagar-382428.
		Note: i. EMD in the form of cheque will not be accepted.
		The bid can only be submitted after uploading the scanned copy of EMD Documents and original should be deposited in office of e-tender officer, within the period of bid submission as mentioned.
		Bids received without requisite EMD shall be summarily rejected.
5	कार्य समापन की अवधि	485 days (16 महिने) (इस अवधि में परियोजना के पूरा होने तक ठेकेदार द्वारा डिजाइन कार्य, वैधानिक अनुमित प्राप्त करना एवं निर्माण कार्य (बिल्ड) व आईपीआर को सुपुर्दगी शामिल है)
	Completion period	485 days (16 Months) (Including Design, obtaining statutory permissions & Construction works (Build) by Contractor till project completion, and Transfer to IPR)
6	निविदा प्रक्रिया शुल्क	Nil
	Tender Processing Fee	Nil
7	निष्पादन गारंटी Performance Guarantee	स्वीकृति पत्र जारी करने और कार्यादेश जारी करने से पहले 15 दिनों के भीतर निविदा मूल्य का 5%। 5 % of Tendered Value to be submitted within 15 days upon issue of Letter of Acceptance and before placing Work Order
	COL 1D THE C. A.	ration of Workshop facility (Extension of Workshop Fabrication

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8	सुरक्षा जमा राशि	निविदा मूल्य का 2.5% बिलों से काट लिया जाएगा।
	Security Deposit	2.5% of the Tendered Value shall be deducted from the bills.
9	CPP Portal वेबसाइट https://eprocure.gov.in/eprocure/app पर देखने तथा डाउनलोड करने के लिए निवेदा दस्तावेज़ की उपलब्धता	दि. 01/02/2024 को 15:00 से 05/03/2024 को 15:00 बजे तक
	Availability of Tender Documents for view and download on CPP portal website https://eprocure.gov.in/eprocure/app	From 15:00 Hours on 01/02/2024 Up to 15:00 Hours on 05/03/2024.
10	साइट विजिट, यदि हो तो Site Visit, if any	एजेंसियों द्वारा साइट विजिट(यदि हो) -दि. 09/02/2024 को 15:00 बजे तक संपर्क अधिकारी - श्री शैलेन्द्र त्रिवेदी, प्रभारी अधिकारी, e-tender, प्लाज़्मा अनुसंधान संस्थान, इंदिरा पुल के पास, भाट, गांधीनगर-382428. प्राथमिकता से ईमल द्वारा: etender.icdc@ipr.res.in या दूरभाष नंबर: -079-2396 2000, 2396 4009 के माध्यम से Site visit by Agencies (if any) - up to 15:00 Hours on 09/02/2024. Contact officer Mr. Shailendra. Trivedi, officer in-charge, e-tender, Institute for Plasma Research, Near Indira Bridge, Bhat, Gandhinagar -382428. Preferably by email: etender.icdc@ipr.res.in or through Tel No:-079-2396 2000, 2396 4009
11	बोली पूर्व स्पष्टता Pre-bid clarification.	आवेदक CPP portal वेबसाइट https://eprocure.gov.in/eprocure/app पर अपने प्रश्नों को अपलोड करके दि. 12/02/2024 को 15:00 बजे तक निविदा दस्तावेज़ के बारे में स्पष्टीकरण मांग सकता है। The applicant can seek clarifications regarding Tender document up to 15:00 Hours on 12/02/2024 by uploading their queries on CPP portal website https://eprocure.gov.in/eprocure/app स्पष्टीकरण दि. 19/02/2024 को 15:00 बजे तक उसी वेब पोर्टल पर अपलोड किया जाएगा। The clarifications will be uploaded on the same web portal by 15:00 Hours on 19/02/2024
12	निविदाओं के ऑनलाइन जमा करने की आरंभ तारीख और समय Start date and time of online submission of tenders	दि. 20/02/2024 को 15:00 बजे से From 15:00 Hours on 20/02/2024.

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13	निविदाओं के ऑनलाइन जमा करने की	दि. 05/03/2024 को 15:00 बजे तक
	अंतिम तारीख और समय	, -,
	Last date and time of closing of	15:00 Hours on 05/03/2024.
	online submission of tenders	
14		श्री शैलेन्द्र त्रिवेदी, प्रभारी अधिकारी (e-tender), प्लाज़्मा अनुसंधान
	EMD जमा करने की अंतिम तारीख।	संस्थान, भाट, गांधीनगर-382428 के कार्यालय में दि. 06/03/2024 को
		15:00 बजे या उससे पहले
		दूरभाष सं. 079 23962000, 079-23964009
	Last date for submission of EMD.	On or before 15:00 Hours on 06/03/2024 in the Office of
	Last date for submission of EMD.	Mr. Shailendra. Trivedi, Officer In-charge (e-tender),
		Institute for Plasma Research, Near Indira Bridge, Bhat,
		Gandhinagar -382428 Phone no. 079 23962000, 079-23964009
		Thoma no. 079 25902000, 079 2590 1009
15	तकनीकी बोली (भाग-I) के ऑनलाइन	दि. 07/03/2024 को 15:00 बजे
	खोलने की तारीख और समय	तकनीकी बोली (भाग-I) प्लाज़्मा अनुसंधान संस्थान, भाट, गांधीनगर-
		382428 में ऊपर दर्शाई गई तारीख और समय पर खोली जाएगी।
		On 07/03/2024 at 15:00 Hours
	Date and time of online opening of	, ,
	Technical Bid (Part -I)	Technical bid (Part-I) will be opened at Institute for
	,	Plasma Research, Near Indira Bridge, Bhat, Gandhinagar -
		382428 at the stipulated date and time as above.
16	अर्हता प्राप्त बोलीकर्ताओं की वित्तीय	
	बोलियों (भाग-II) के खुलने की तारीख	इसकी सूचना बाद में दी जाएगी।
	और समय।	•
	Date of opening of Price Bids (Part	Will be notified at a laten data
	-II) of Technically qualified bidders	Will be notified at a later date.

(II) BRIEF PARTICULARS OF THE WORK

The Institute desires to construct following building on the basis of Design, Obtaining Statutory Permissions, Construction (Build) and Transfer to IPR with all utility services (Such as Electrical, HVAC, Mechanical, Fire Protection etc).

Construction of a Workshop Shed Building (Approx. Building carpet area **552 Sqm** i.e 17.5 m x 31.5 m). As well as, contractor shall modify the existing pyrolysis lab shed (Approx. i.e 7.8 m X 5.8 m) adjacent to existing workshop shed into office cabins space.

The broad scope of work and minimum requirements of Building, services and Tentative single line Sketch of proposed building is attached in this technical bid.

The requirement mentioned in this Tender is for preliminary idea to contractor as with minimum requirement as desired by Institute, all that needs to be done for the building to be fully functional is in the scope of bidder, the bidders shall include all such aspect of work in the scope of this tender in their quoted amount.

The location of building site is at **IPR campus,** Institute for Plasma Research, Bhat, Gandhinagar - 382428, Gujarat

(III) BROAD SCOPE OF WORK and REQUIREMENTS

(A) Broad Scope of Works:

The land for the said project is available at IPR campus.

The broad scope of work consists of

(a) Design:

- 1. Carry out Topographical Survey
- 2. Carry out Site Survey of existing building & Utility services
- 3. Carry out Soil Investigations (Geo-Technical Investigations) for proposed site.
- 4. Design of proposed Building and Utility services
 - i) Architectural,
 - ii) Civil works
 - iii) Structural,
 - iv) Proof Checking of Structural design by any IIT/IISc/NIT/Govt. Engineering College (After approval of IPR),/ NIRMA University/ PDE University
 - v) PH works (Plumbing , Sanitary , Water Supply & Drainage) Internal & External
 - vi) Electrical works Internal & External,
 - vii) HVAC works,
 - viii) Mechanical including Crane, Motorized Rolling shutters, openings, etc.
 - ix)Fire Detection, Fire protection, Fire Safety works and Emergency evacuation plan/system, signage and General Development works including approach Roads, Strom water drain, Street light, water supply, Sewage drainage, loading & unloading platforms etc.

The broad requirements are given by IPR in this tender. The design should be in accordance with relevant/applicable IS codes / National Building Code and Vulnerable Atlas of India, & Building Materials & Technology promotion council (BMTPC), Ministry of Housing and Urban affairs Govt. India.

The bidder/ contractor shall consider seismic and other essential parameters for designing in accordance to respective IS and National Building code applicable and Vulnerable atlas of India & Building Materials & Technology promotion council (BMTPC), Ministry of Housing and Urban affairs Govt. India, for the proposed Buildings for given site location.

- 5. The design and layout shall be prepared considering optimum use of existing land area.
- 6. The design shall be carried out through qualified & experienced licensed Architect, licensed Structural engineer and qualified electrical/HVAC/ Mechanical engineers/ personnel for all other utility services. Valid documentary evidence shall be submitted to Institute before designing.
- 7. The contractor shall submit a preliminary drawing/ design and obtain consent/ confirmation of IPR on the fulfilment of the Requirements from the Institute for Plasma Research.
- 8. Contractor shall prepare all designs conforming to relevant Bureau of Indian Standards, National Building Code & in accordance with byelaws / acts other regulations of Statutory Bodies.
- 9. The Contractor shall provide the Institute, Four sets of approved preliminary drawings and Six sets of execution drawings and "As built drawings" in hard copy as well as in Soft copies (AutoCAD, .pdf & other design files) of all the Drawings & Documents.

(b) Obtaining Statutory Permissions:

Obtaining all Statutory Permissions - Construction & Building Use- (including but not limited to GIDC/GUDA/AMC/GMC, Fire Department, Civil Aviation (AAI) (if applicable), Forest Department, Environment and Pollution control board, Town planning, MOEF (if applicable), any other statutory bodies, etc. for Construction and Building use permission.

The construction Permissions and other statutory permission shall be obtained well in advance before start of execution construction work at site.

The Building use permissions shall be obtained after completion of works and before handing over of the Building & facility to IPR.

The quoted amount shall be inclusive of all coordination and liaison costs. The statutory charges shall be borne by Institute at actuals. Any charges towards delayed submission (Penalties/ Interest etc) shall be borne by Bidders/contractor.

(c) Construction (Build):

- 1. Construction of Building & General Development including all Utility services such as Civil, Structural, PH works (Plumbing, Sanitary, Water Supply & Sewage Drainage, storm water drain) Internal & External, Electrical works Internal & External, Mechanical including Crane, Rolling shutters, openings, etc, , HVAC works, Fire Detection, Fire Protection, Safety works, emergency evacuation plan/system and signage's and General Development works including retaining wall, stone pitching on slope, approach Roads, Strom water drain, Street light, water supply, Sewage drainage, loading & unloading platforms etc.
- 2. Carrying out Anti-termite Treatment. (Pre-Construction as well as post construction.)
- 3. The Construction is inclusive of supplying all construction materials (standard fitting and accessories included), labour, etc. complete, so as the complete the building to make it useable for the purpose intended and fulfil requirements it is constructed for.
- 4. The materials and workmanship of the construction work should be conforming to relevant applicable IS codes /National Building Code and best standard practices for construction works.
- 5. The execution of work shall be supervised through qualified and experienced Engineers (requisite numbers) at site on full time basis day to day works and they shall be responsible to monitor progress of work, to execute the work as per approved drawings, material, construction procedures and practices and to ensure quality in day-to-day work in compliance with as per specifications and standards.

The contractor shall be responsible for deployment of qualified and experienced safety officer/Engineer for full time at site.

- 6. The contractor shall maintain all the documents and records required by various statutory authorities and all register/ records as advised by Institute (EIC) and as per CPWD guidelines. These documents shall be submitted to the Institute as and when asked for and same shall be handed over after completion of the project.
- 7. The contractor shall ensure that they have complied with registration under Contract Labour (Regulation and Abolition) Act, 1970 and Central Rules, 1971 and abide by laws pertaining to labour including payment as per Minimum Wages Act and any other Act or enactment relating thereto and rules framed there under from time to time. The Contractor shall ensure compliance by the contractors of all labour laws and relevant Statutory Acts including Labour License, Minimum Wages Act, etc.
- 8. The quality of the materials and workmanship shall be per specification, relevant codes and as per Sound Engineering practices and contractor shall maintain necessary records. The mandatory tests to be conducted for all materials & workmanship that should confirm as per specifications and relevant IS standards. The cost of all testing, PDI including third party testing of materials etc shall be borne by bidder/contractor.
- 9. The contractor shall ensure that they have taken requisite insurance to cover their workman's' under 'Workmen's Compensation Act' as per the contract. The contractor shall ensure that all such policies shall remain in force throughout the execution of project.
- 10. The Contractor should take all necessary safety precautions at work site for Workers and personnel. The safety Instruction and Safety Protocol to be followed at site shall be obtained from Institute before start of work. The Contractor is solely responsible for safety of Workers and Personnel at site.
- 11. The contractor should take all necessary precautions of safety of Building & Structure including existing structures and existing services of the Institute.

- 12. The contractor shall also take Contractor's All Risk Insurance Policies" to cover the loss / damage not limited to that caused by natural calamities / accident / accidental collapse of partially completed work, materials and plant at site and for third party claims for injury / damages. The contractor shall ensure that all such policies remain in force throughout the execution of project
- 13. The scope of work also includes providing and executing with necessary consumables, equipment's, temporary works, temporary storage sheds, temporary labour and staff colony(outside of Institute's Premises), temporary site offices, constructions plant, fuel supply, power, transportation including making arrangement of power and water where ever required and all incidental items not shown or specified herein but necessary for the completion of works, on strict accordance with specifications and including revisions and amendments there to as may be required during the execution of the work.
- 14. In case of non-availability of detailed specification in CPWD 2019 or latest version, Specification of the same shall be executed as directed by Engineer-In-Charge, whose decision shall be final. No extra shall be payable for execution of works as a result of adopting detailed specification or India Standard of relevant or Other Standards thereon.

(d) Transfer:

The Building including all services shall be transferred to IPR after completion of all works and attending all defects observed during inspection by IPR during handing over. Contractor shall also obtain all statutory permission including Building Use permission within the given time frame to the approval of IPR.

All Project details with As-built drawings, documents and maintenance manuals, Statutory Building user Permissions documents, Guarantee Bonds / Guarantee / Warranty certificate (s), etc. shall be handed over to IPR at the time of Transfer.

The Contractor shall submit six (06) copies of as built Drawings along with soft Copies of all the Drawings and design files (.pdf, AutoCAD, and any other software).

(e) Defect liability period :

(i) Defect Liability period:

The Defect Liability period is Three years from the date of handing over of Building including Utility services to IPR for construction defects.

The contractor shall carry out detailed inspection during defects liability period and get rectified all construction defects noticed during such inspection before the end of defects liability period. Any defect or inadequacy occurred in the work carried out because of the services performed by the contractor prior to the date of final acceptance of the work by the Institute, the contractor shall be under legal obligation to perform at his own initiatives and free of cost without any additional liability to the Institute, all such services as shall be deemed necessary to remedy such defects or in-adequacy. The decision of Institute regarding defect or inadequacy in the work so shall be carried out and services rendered shall be final and binding.

In case, despite the specific request by the Institute to the contractor to rectify or remedy the defect or inadequacy so pointed out and brought to the notice of the contractor, if the contractor fails and neglects to rectify the same, within the time frame given by the Institute, then the Institute shall have every right to rectify the same from the third agency at the costs and risk of the contractor. Institute has every right to deduct/recover the said expenses incurred by Institute to rectify the same from the third party agency from the payment due and payable to the contractor.

Note:

1. The broad minimum requirements are provided in this tender document. However, bidders are expected to visit the work site and verify for themselves the site conditions, levels, topography, existing structures and other relevant & allied factors which have bearing on their assumption and quotes.

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- 2. The work shall be carried out according to the design/drawings developed and approved by the Institute for Plasma Research (IPR)
- 3. The necessary layout and details are to be developed keeping in view the statutory & functional requirements of the system & facilities, providing enough space & access for operational use and maintenance. The certain minimum requirements are indicated in this Requirements & specifications.
- 4. Any discrepancies found at a later date shall not form the basis of any extra claim or time extension. Contractor shall take care to assess exact nature and quantum of work.
- 5. The contractor should fully apprise himself of the prevailing conditions at the proposed site, meteorological conditions like climate rainfall, relative humidity, wind, Seismic and site specific parameters shall include for all such conditions, contingent measures in the bid including those which may not have been specifically brought out in the specifications.
- 6. Ten years Guarantee shall be provided for Anti-termite treatment, Water proofing works and Leak proof Building including Roof and Walls. The Guarantee Bond shall be provided in the prescribed format given by the Institute.
- 7. Contractor shall attend all the periodical meetings related to the said work at Institute's office as and when called for.
- 8. The Contractor should submit structural stability report for the Building and Structures designed & constructed by him/her.
- 9. The Contractor should maintain all the documents required by various statutory authorities and handover the same after completion of work to Institute.
- 10. The contractor shall submit physical progress reports once every fortnightly or as desired by Institute.
- 11. The Contractor shall arrange for Temporary Electrical Power and Water required for construction work at their own cost. Or if required the same can be made available by Institute (If available) on chargeable basis. The Water charges @ 1% of the value of work, and Electricity charges @ Rs.13 per unit shall be charged if made available by Institute. However all necessary requirements for tapping of the services shall be done by contractor and the cost shall be borne by contractor.
- 12. The contractor shall make their own arrangement for Temporary site offices for their personnel.
- 13. The Workers colony is not allowed in the Institute premises, the contractor shall make their own arrangement outside IPR premises. The Workers and contractor staff is not allowed to stay in campus beyond working hours for the construction works.

- 14. The Institute undertakes no responsibility in respect of any life, health, accident, travel and any other insurance for the personnel deployed by the contractor.
- 15. The contractor shall be responsible for any damages or loss on account of neglect of professional duty or conduct on the part of such staff or Engineers or others. To this effect, the contractor shall indemnify the Institute.
- 16. The total quoted amount shall be inclusive of all items of work that are required to complete the project including statutory requirements for making building and facility for use.
- 17. The tender is a lump sum basis for **Design**, obtaining all **statutory permissions**, Construction (**Build**) and **Transfer** to IPR.
- 18. The contractor shall follow all security regulations of the Institute.

(B) Minimum Requirements of the Project

The Workshop Shed building is to be constructed at Existing Workshop yard (i.e Back side of Existing Workshop), this is a broad minimum requirements, for information to contractor. The detailed designing shall be done in approval of IPR.

Sr. No.	Description	Basic minimum Requirements (Providing, Erecting, fixing, Supply Installation Testing & Commissioning including all materials and labour etc. complete.)	Remarks
1.	Workshop Shed:	1. Workshop Shed (see attached sketches):	
	Civil and Structural Requirements	The Workshop Extension Shed Building shall consist of structural steel Columns, Beams, Rafter along with Purlins .etc. as per structural requirements. Brick masonry walls (min 230 mm thick) up to 3 m height all around in coordination with existing structure and remaining portion (above 3 m) with 40mm thick flat PIR panels for walls and 60 mm thick corrugated/ribbed PIR panels for roofing. (Density 40kg/cum) Workshop extension is proposed for covering 552 sqm (i.e about ~31.5 m clear x17.5 m clear) floor area. Height of Shed building will be based on Crane clearances, minimum hook height from FFL, Coordination with existing structure and design requirements. The Proposed Workshop Shed Area shall also consists of spaces such as a) Welding cabins room and Drawing	

- discussion room of suitable dimensions made of anodized Aluminium partitions with Glass (min 5mm and as per IS), and compact sheet (min 5mm and as per IS), doors, window along with all hardware fixtures, including roofs.
- b) Separate Wash area consisting of wash Basin (Two nos), and one additional Bib Tap for washing, with a facility of Emergency Eye wash provision.
- c) Workshop Change room with washroom facility and ventilation/exhaust:
- i. One toilet Block having two wash basin, with Two no. of Urinals, along with separate EWC with Bath facility.

(The structure shall Preferably be with brick masonry walls and RCC Slab @ 3m)

ii. One Toilet Block for Divyang (including all applicable fixtures, grab bars etc) consisting of One EWC, hand wash (wash basin), and Bath Facility.

(The structure shall Preferably be with brick masonry walls and RCC Slab @3m)

iii. Change Room for changing uniforms etc. (
The structure shall Preferably be with brick masonry walls and RCC Slab @ 3m)

(All the above three may be accommodated in a single block based on the available space area. The sizes of above area shall comply to NBC norms)

- 2. Any other Space required for Utility services such as Electrical Power panel, Forced Ventilation, RCC Platforms, etc. While designing, the same shall be considered in addition to floor area specified above.
- 3. The Existing pyrolysis Lab shed (approx. 5.8m X 7.8m) need to be modified. (This shall also be leak proof). The existing mesh and sheets shall be removed. Load bearing brick masonry walls (min 230 mm thick) up to 3 m height all around in coordination with existing structure and remaining portion (above 3 m) with 40mm thick flat PIR panels for walls and 60 mm thick corrugated/ribbed PIR panels for roofing.

The inside space of this pyrolysis lab shall be converted to Office cabins with Load bearing Brick Masonry Walls (230 mm thick) and RCC Roof slab (as designed) at @3 m height.

A spiral or suitable stair case shall be provided to access first floor.

The cabins shall be provided with Aluminium shutter doors, & windows etc, with all hardware fixtures, including all electrical conduting, light fixtures, plug points, LAN ports etc.

4. RCC Road of Minimum 5 m width with sufficient required radius for turning for Truck movement. As shown in the tentative drawing with M30 Grade Concrete, including steel reinforcement and dowels bars as per IRC standard and specification. The side of RCC road shall be fixed with RCC curb stones. The road shall also have grooves made and the same shall be filled with polysulphide sealant.

Note: The minimum clear height from FFL to crane hook shall be about 4 m. The additional height for Crane Installation and statutory clearance above crane shall be added to the Building height in the design and drawing. The same shall be approved from the IPR.

2.	Foundations & Works up to	a. RCC Sub Structure with RCC foundations, RCC Columns/Pedestals and RCC Beams.	
	Plinth level	b. Plinth retaining structure below Plinth level with Brick work along with RCC beams	
		/ground beams or RCC Walls/ pardi.etc as per design.	
		 Plinth level shall be minimum 600 mm up from the existing RCC Road (OR) matching with existing workshop floor level 	
		 d. Plinth filling with well compacted good earth Murrum / Sand Filling, PCC and RCC Flooring complete with floor hardener. 	
		e. Floor load bearing capacity: 3 Ton/ Sqm	
		f. Hume pipe / Cable trench/ RCC trench shall be provided as per requirement in the Floor.	
		(The complete finish of Plinth level shall include RCC tremix flooring with floor hardener work.)	
3.	Super Structure of Building	Steel Structure building with Conventional Steel Sections or Pre-Engineered Steel Sections with two coat of paint, including two coat of primers, along with support structure for 5 Ton EOT crane.	
		Cage ladder (s) shall be provided to access rain water gutters and/or to access the Crane or as per requirements.	
4.	Walls	Steel Structure Building with conventional brick masonry walls (minimum 230mm thick) with Plaster & Paint up to 3 m height from Plinth level and remaining height up to top of the Building with prefabricated (PIR Panels) sandwich panels of made from PPGL /Galvalume sheet of 0.5 mm thick on both side with 40 mm thick insulated rigid Polyisocyanurate (PIR) foam insulation sheets along with required openings.	
		Required Partitions as per required height for Office cabins, Change room, welding cabins meeting rooms and Toilets & wash area as per design and as mentioned above in minimum requirements shall be provided.	
		The Building shall be water leak proof.	
5.	Roof	Roof with Steel Structure truss covering with prefabricated (PIR Panels) sandwich panels of made from PPGL /Galvalume Corrugated /flat sheet of 0.5 mm thick each on top side and bottom side respectively with 60 mm thick insulated rigid Polyisocyanurate (PIR) foam insulation sheets with	
		required slope and Rain water gutter and down take pipe.	

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		The Building shall be water leak proof.	
6.	Flooring	RCC floor with Vacuum Dewatered (Trimix Flooring: Grooves cut to prevent cracks shall be filled with polysulphide sealant along with floor Hardener.	
7	Doors:	Minimum Doors required	
		 Main entrance Door –size at actuals for movement from existing Workshop to extension Workshop shed. 	Aluminium section frame with 25 micron anodizing and Door shutter of
		2) Doors for Toilets & Wash area-	Wooden Exterior grade Ply with laminate on both
		 Doors for Office cabins, welding room, drawing room and Change room as per Architectural design requirements. 	the sides. (Aluminium with flush door).
		Any other location as per Architectural design requirements.	With hardware fixtures as per preferred make list.
		5) Emergency doors to exit the building, at location as per Architectural design requirement.	Aluminium section frame with 25 micron anodizing and Door shutter of
		All external openings shall be provided with Weather shed of appropriate width and length to protect against rain water ingress.	and Door shutter of Wooden Solid board with laminate on both the sides.
			With hardware fixtures as per preferred make list.
8.	Windows	Windows shall be provided for Natural light and ventilation, having opening area as per National Building code and good architectural and engineering practices, considering the minimum requirements for catering of Industrial type Air coolers. All the external openings shall be provided with Weather shed of appropriate width and length to	Aluminium Section openable /Sliding windows with fully glazed Glass (min 5mm) Stainless fly proof mesh, shall be provided. The Windows shall be provided with MS safety grills.
0	Nov. 43 at 2 at 1	protect against ingress of rain water.	
9.	Ventilation / Openings	Heavy duty exhaust fans of adequate size as per heat load calculation, at suitable height and locations as per relevant IS Codes.	
		Industrial type heavy Duty wall mounted fans for internal air circulation inside shed building, as per design requirements.	
		Ventilators of fixed glass with aluminium louvers need to be provided as per IS codes.	
10.	General requirements	1. 5m wide RCC Tremix Road with curbing (on both sides) as per drawing with necessary turning radius for movement of truck etc. Complete with steel reinforcement and minimum with M30 grade Concrete, along with making of groove and filling	

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			T
		polysulphide sealant (To be designed for standard vehicular design load of 40Ton).	
		Strom water lines with necessary Chamber and grills, and connecting with existing location as decided by IPR etc complete.	
		 External Drainage lines with Manhole Chambers and connection with existing drainage system. 	
		 Laying of water supply line including making connection from existing source of water line. 	
		 Hume Pipe (NP3) of min 300 mm dia or as per design requirement. To facilitate for storm drain, electrical cables or any other facility and for road crossing etc. 	
		Stone pitching/ retaining wall as per design for general development around the building.	
		Plinth Protection with minimum steel reinforcement as per design requirement.	
		 Rain water harvesting system (Percolation Pit) shall also be made to recharge the ground water. 	
11.	Painting internal surfaces (Plastered / Cement Board, Partition, etc.)	Two or more coats of SUPER/PREMIUM ACRYLIC PLASTIC EMULSION with Primer and Putty	
12.	Painting of external plastered surfaces of approved colour	Two or more coats of 100% ACRYLIC EXTERIOR EMULSION PAINT with exterior primer.	
13.	Plastering (External surfaces)	Sand face Cement plaster - 20 mm thick in two coats for masonry/concrete surfaces with back coat of 14 mm thick (in C.M -1:4) and finishing coat of 6 mm thick with (in C.M-1:3).	
14.	Plastering (Internal surfaces)	Cement plaster 20 mm thick in two coats for masonry/concrete surfaces with back coat and finishing coat of 10 mm thick each with smooth mala finish. First coat in CM-1:4, and second coat in CM 1:3.	
15.	Dismantling of Existing Storage shed, Chain link fencing, Existing Cabins & Pyrolysis Lab.	1. Existing Storage Shed: In the proposed extension area, a part of space (approx. 27.5 m X 5m) is being used as material storage. The structure steel space shall be dismantled during construction of new building. This shed needs to be dismantled including its foundations /sub-base as well as the existing Chain link fencing with gate including foundations etc without damaging the existing workshop building.	The dismantling activities shall be done without damaging the existing buildings / services. The material dismantled shall be property of IPR and the serviceable materials as decided by IPR shall be handed over to the IPR Stores. The unserviceable materials / debris as
		2. Existing cabins: Existing wooden cabin	decided by IPR shall be disposed off outside

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		 (approx. 9.15m X 3.5m) inside the existing workshop building including all support structure needs to be dismantled. 3. Pyrolysis Lab: Existing pyrolysis lab (approx. 5.8 m X 7.8 m) super structure shall be modified and then three Office cabins need to build as enumerated earlier above. 4. Entry to pyrolysis lab. Making entry i.e access from existing workshop building to office space in the modified area shall be made. (Including removing the Window and making entry passage). 5. Any other services/ underground services/ structure etc for dismantling /demolition required for the construction of this work shall be carried out in consultation with EIC.
В	PH Works	
1.	Pipe line and other services.	External Water supply line of GI pipes – B Class with anti-corrosive paints or CPVC / UPVC - Schedule 80 Pipes with control valves for External Lines from source to building buried in the Ground.
		2. Internal Distribution lines with CPVC / UPVC schedule 80 pipes concealed in walls with control valve.
		3. External Sewage Drainage RCC Hume pipe (NP3) lines with Manholes (Heavy duty covers) and making connection in existing drainage line all inclusive in working condition at location as shown by EIC.
		4. External Strom water drainage, RCC Hume pipe (NP3) lines with manholes (Heavy duty covers) with Grating. (location as shown by EIC)
		5. RCC Hume pipe (NP3) lines with manholes (Heavy duty covers) for utility services, sewage line, any other services and making connection with existing chamber all inclusive in working condition at location as shown by EIC.
		6. Internal sewage line with SWR pipes of min 6kg/sqm.
2.	Two Toilets :	Each Toilet shall consist of at least following:
	One for Gents and one for Divyang.	 Vitrified tiles antiskid flooring – Laid over a mortor bed of 20 mm thick in CM 1:4, with neat cement slurry of 3.3 kg/sqm, laid with 4 mm gap and filled with grout of Ardex Endura with matching pigment (Colour selection to be approved by Institute) Vitrified tiles dado up to lintel level

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	T	T	
		i.e. up to 2.1 m Laid after a bedding plaster (rough) to receive the dado tiles, fixed with 4 mm gap filled with Ardex Endura high strength grout (Colour selection to be approved by Institute) 3. Wash basin (WB) -Presmatic Pillar Cock, Angle cock, PVC connections, waste coupling & Bottle trap, etc. complete 4. Water Closet (WC)- EWC, Health Faucet, Metropole,/flush tank, seat cover, paper roll holder, Bib cocks etc. complete 5. Shower for bath facility 6. Emergency Eyewash Station 7. Urinal for Gents Toilet with pressmatic flushing system. 8. Exhaust fan & Ventilator of fixed glass with aluminium louvers as per design. 9. One additional Bib Tap. 10. Mirror with frame 11. Liquid soap dispenseretc. 12. Toilet paper holder. 13. Hat Hooks 14. Towel rails. All required Nahni Trap, Gully Trap etc shall also be provided. All CP fittings shall be of CP brass.	
C	Electrical Works	Toilet as per NBC/CPWD norms shall be provided.	
1.	Lighting	General Lighting for entire building with suitable LED light fixtures suspended from Roof Level for uniform illumination of 400 Lux at 1 m above floor level including necessary piping and wiring. Suitable light fixture as per standard lux level to be provided in other area.	Three separate 1.5 Sq.mm. Cu FRLS wires to be drawn from DB to SB and SB to primary point. Neutral and earth to be looped in Switch Board.
2.	Power Points	Power Points	Three separate wire of 2.5
		 1. 1 nos. 5 amp and 1 no. 5/15A combined Plug Points - 20 Nos. with required size and length of wire as per site condition and location of plug points as approved and instructed by EIC. 2. Three Phase 32 amp FP MCB with enclosure – 15 Nos. to be installed nr. Equipment to feed power from LT panel along with required size and length of armoured cable as approved and instructed by EIC. 	Sq.mm. Cu FRLS wires to be drawn from DB to SB and in case of looping 4 sq.mm. FRLS cu. Wire to drawn from DB to primary plug point.

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		necessa for	enclosure- 5 Nos. to be installed nr. Equipment to feed power from LT panel along with required size and length of armoured cable as approved and instructed by EIC. Other equipment power with required size and length of armoured cable as approved and instructed by EIC (As per attached equipment list). al: Power supply cables along with ary plug point/MCB/MCCB arrangement	
			Air Conditioners Motorized Polling shutter	
			Motorized Rolling shutter For all the other Electrical fixtures provided	
		7.	by the contractor within and outside of the Building.	
		5.	For Wall mounted fans, Exhaust fans etc.	
		6.	For Industrial air coolers	
		7.	J I	
3.	General	1.	Street light poles along the road as per National Building Code (minimum 60 Lux level at 1 m height from road level), with suitable LED light fixtures.	Cables for street light (From existing street light pole to proposed street light poles) poles of
		2.	Wall mounted industrial fans at suitable height and locations as per relevant IS Code and as instructed by the IPR including wiring and plug points.	required size will in the scope of contractor. Wiring shall be carried
		3.	Heavy duty exhaust fans of adequate size as per heat load calculation, at suitable height and locations as per relevant IS Code and as instructed by the IPR.	out with Cu. FRLS Wires only.
4.	Distribution Panel and control	1.	Main LT Panel to cater Electrical Load of Building.	Electrolytic grade Cu. Busbar shall be provided
	switches	2.	Lighting Distribution board and Control switches/MCB to cater Building Electrical load	in panels.
		3.	Power Plug Distribution board and Control switches/MCB to cater Building Electrical load	
		4.	One LT Panel for power distribution for User Equipment's (As per attached list in the annexure)	
		5.	AC distribution board as per electrical load.	
5.	Earthing	1.	Cu. Plate Earthing for complete building lighting and power distribution system.	
		2.	Cu. Plate Industrial Grounding type earth pits	

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	2 Nos. for User Equipment.	
	3. GI pipe Earthing/chemical earthing for Steel Structure and lightning protection of the Building.	
Power Connection from existing Source within campus	All modifications / New panel (SITC) as required at the source end LT Panel and cabling from source to proposed LT panels in Building (as mentioned in the drawing location no. 10) (From Existing LT panel room to proposed Workshop shed building).	
Lightening protection System	Lighting protection system shall be installed on Building as per NBC (with Latest amendment), along with adequate number of earthings.	
Cables	Required size and length of cables as per equipment list attached in the tender document.	
Cable trench and manhole chambers	Providing required size manhole chambers and cable trench for incomer and outgoing electrical cables. (RCC Cable Trenches with MS Covers).	
Cable tray	Providing required size GI cable tray for incomer and outgoing electrical cables as per electrical load and numbers of cables.	
Telephone point and Network points	4 nos. telephone point with krone box and required incoming cables and point wiring. 12 nos. network points with required point wiring from existing switch.	
Relocation of Existing Electrical Chamber, Electrical Panels & Electrical pole	from existing switch. 1. The Flectrical pole in the proposed approach	
	from existing Source within campus Lightening protection System Cables Cable trench and manhole chambers Cable tray Telephone point and Network points Relocation of Existing Electrical Chamber, Electrical Panels	Structure and lightning protection of the Building.

13	Preferred make of material	Please refer attached list of preferred make of material for Civil/ electrical/ HVAC/ Mechanical works.	Contractor has to procure material from preferred make, and after approval of EIC.
D	Mechanical Works		
1.		Remote operated Single Girder EOT Crane (EOT crane of 5 ton Hoisting Capacity of main hook, with travel across length and width of Building. Crane Span: approx. 17.5 m as per Actual Building width) Longitudinal Travel length of crane: approx. 31.5 m (as per Actual Building Length) Vertical Lift - 4 meters below the Hook.	Design Supply Installation Testing & Commissioning of the Crane shall be done as per approval of EIC and as per Relevant IS codes.
		Long Travel Speed - 15 meter per Minute	
		Cross Travel Speed - 15 meter per Minute	
		Main Hoist Lifting speed - 3 meter per Minute with provision for incremental inching	
		All necessary arrangement for support structure, Power supply, pendent and Remote control etc. complete in working condition.	
2.	Rolling Shutter	Motorized (electrical as well as manual operation) rolling shutter of 4m (W) x 5m (clear height)- 1 No. to enable movement of mobile handling and lifting equipment's in-out of the shed area. All the external openings shall be provided with Weather shed of appropriate width and length to protect against ingress of rain water.	Design Supply Installation Testing & Commissioning of the Rolling shutter shall be done as per approval of EIC and as per Relevant IS codes. (Motorised Pre colour coated GI / Galvalume Rolling Shutter Complete in all respect)
E	HVAC Works		_
1.		 Supply, Installation, Testing and commissioning of 2 Ton Inverter type, five star rated air conditioners with copper coil condensing units. The scope includes necessary insulated copper piping, control & power cables with floor standing /wall mounted powder coated/painted stands for ODUs etc. – (QTY.: 03 Nos.) in each office cabin Supply, Installation, Testing and commissioning of 1.5 Ten Inverter type 	
		commissioning of 1.5 Ton Inverter type , five star rated air conditioners with copper coil condensing units. The scope includes necessary insulated copper piping, cables with floor standing / wall mounted powder coated/painted stands for ODUs etc.	

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		(QTY.: 02 Nos.) in workshop change room.	
		3. Supply and installation of industrial air coolers of minimum 10,000 CFM /18000 CMH capacity with powerful air throw, heavy gauge and robust body, lockable heavy duty castor wheels for easy movement, min. 3 speed fan, fully closable horizontal louvers, auto vertical louvers /swings, honeycomb cooling media, auto water filling float valve, drain point plug, pump etc. complete with all required accessories (QTY.: 05 Nos.)	
		4. Laying all around the wall inside premises a pipe line network for Compressor Line, with all safety features, control valves with necessary provision of tapping etc with outlet at 7 locations as directed by EIC.	
F	Fire & Safety Works		
1.		Fire Detection, Fire Protection, & Safety works and Emergency evacuation plan/system, signage shall be done as per National Building Code 2016 or relevant Indian Standard specifications and conforming with relevant specifications of fire authorities of local Municipal Corporation or State.	

(IV) REQUIREMENTS AND CRITERIA FOR ELIGIBILTY.

The applicant shall fulfil the following Initial eligibility requirements on their own. Joint ventures are not accepted.

Sr. No.	Criteria for Eligibility.	Documentary proof for the eligibility (To be Scanned and Uploaded) Note: The applicants are requested to fill up the facts & figure in the prescribed format. Simply filling like Yes or No shall not be accepted.
1	Should have satisfactorily completed in India construction of Building (s) having construction cost of Project as mentioned below, during last 7 years as on ending previous day of last date of submission of tenders:	Work Orders & Completion certificate for each qualifying completed work(s) issued by an officer not below the rank of Executive Engineer or Equivalent officer or Owner or Client. Note:
	 i. Three projects each costing not less than Rs. 123 Lakhs	Completion certificates for works issued by Private parties shall be supported by TDS (Tax deducted at Source) Certificates for the said cost.
	Framed/ Steel Structure buildings. The value of executed works will 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 last date of receipt of tender.	
2	Should have valid minimum Bank solvency of a Scheduled Bank of Rs. 123 lakhs	Form of Bankers Certificate from a scheduled Bank
3	Should have had minimum average annual financial turnover of Rs. 154 Lakhs of the construction works during the immediate last three years ending 31 st March , 2023 .	Annexure -Form "A": Financial information, Chartered Accountant certificate for the Annual financial turnover showing Profit & Loss.
	Year in which no turnover is shown or Zero turnover, would also be considered for	

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	working out the average.	
4	Should not have incurred any loss (profit after tax should be positive) in more than two years during the last consecutive five years ending on 31st March, 2023.	Annexure -Form "A": Chartered Accountant certificate for the Annual financial turnover showing Profit & Loss.
5	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: Bidding Capacity = {[AxNx1.5]-B}	The bidders shall work out the Bidding capacity and upload the working on the Portal along with supporting documents.
	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.	
6	a. The bidder shall be compliant to the Public Procurement (Preference to Make in India), Order 2017 (as amended from time to time) issued by Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce and Industry. Also bidder must submit undertaking along with bid for local content of % offered in subject tender.	Annexure-I, Self-Certification under preference to Make in India order Certificate
	b. "Only 'Class-I local supplier' as defined in Public Procurement (Preference to Make in India), Order 2017, are eligible to participate for subject tender ".	

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Note:

- 1. Any entity which has been barred by the Central/State Government, or any entity controlled by them from participating in any project and the bar subsists as on the date of Application, would not be eligible to submit an Application. An Applicant should, in the last three years from the last day of submission of tender, have neither failed to perform on any contract, as evidenced by imposition of a penalty by an arbitral or judicial authority or a judicial pronouncement or arbitration award against the Applicant, nor been expelled from any project or contract nor have had any contract terminated for breach by such Applicant/ Consortium member.
- 2. The firm has a valid working license (not expired) and a valid registration on certificate showing that the company is legally established under the law of government of India.
- 3. The Firm should be qualified and not black listed by any government department / agencies.
- 4. The bidder Firms should have executed similar nature of project as mentioned in India only.
- 5. The applicant should not be under liquidation, court receivership or similar proceedings.

6. FIRM'S RESPONSIBILITY BEFORE PROPOSAL SUBMISSION

- a. The Bidder shall be responsible for all the costs associated with the preparation of the Proposal and participation in the selection process. IPR will not be responsible or in any way liable for such costs, regardless of the conduct or outcome of the selection process.
- b. The Bidder shall ensure that the bid is complete in all respects and conforms to all requirements indicated in the Tender document. Incomplete bids are liable for rejection.

Documents to be scanned and uploaded by applicant for proof of criteria for Eligibility and Evaluation.

Prospective Bidders shall satisfy themselves of fulfilling all the eligibility criteria and in possession of all the documents required before submission of online tender document. The interested Bidders are required to scan / fill in and upload the documents as per following lists within the period of bid submission.

Scanned Copy of the following documents shall be submitted along with Technical Bid, Failing which the Bidders are liable to be rejected.

Note: The Bidders are requested to fill up the facts & figure in the prescribed format. Simply filling like Yes or No shall not be accepted.

1	Proof of Eligibility Criteria No. 1. Work Orders & Completion certificate for each qualifying completed work(s) issued by an officer not below the rank of Executive Engineer or Equivalent officer or Owner or Client.
	Note: Completion certificates for works issued by Private parties shall be supported by TDS (Tax deducted at Source) Certificates for the said cost.
2	Proof of Eligibility Criteria No.2, Annexure Form "I"- Form of Bankers Certificate from a scheduled Bank
3	Proof of Eligibility Criteria No.3 Annexure -Form "A": Financial information, Chartered Accountant certificate for the Annual financial turnover showing Profit & Loss.
4	Proof of Eligibility Criteria No.4 Annexure -Form "A": Financial information, Chartered Accountant certificate for the Annual financial turnover showing Profit & Loss.
5	Proof of Eligibility Criteria No.5 The bidders shall work out the Bidding capacity and upload the working on the Portal along with supporting document (s).
6	Proof of Eligibility Criteria No 6, Annexure-I , Self-Certification under preference to Make in India order Certificate
7	Letter of Transmittal as per Format given in this document.
8	Scanned Copy of EMD .
9	FORM "A" Financial Information
10	Form "B" Details of all Construction works completed during last 7 years ending last day of submission of tender. No works shall be left out.
	Completion certificates and Work Order / Agreement copy issued by the

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	authority concerned to establish work on hand shall be uploaded.	
11	Form "C" Details of project Under Execution (Ongoing project) No works shall be left out.	
	Work Order / Agreement issued by the authority concerned to establish work on hand shall be uploaded.	
12	Performance Reports as per Form-"D" for works mentioned Eligibility criteria 1.	
13	Form "E"- Organizational Structure	
14	Form "F" Details of Administrative and Technical Staff Available with the firm and that Proposed to be deployed to complete the work in time	
15	Form 'G Details of Equipment's available with the firm.	
16	Form "H" Form of Curriculum Vitae (CV) of Key Personnel	
17	Form "I": Form of Banker's Certificate from a Scheduled Bank	
18	Form "J"- NEFT/RTGS Mandate Form for Payment as per Format given	
19	Integrity Pact – letter from bidder to the Institute as per format in Tender.	
20	PAN (Permanent Account Number) Registration / TAN Registration details	
21	GST Registration Certificate	
22	Declaration by Bidder	
23	ANNEXURE-II Annexure to Bid, Form: Eligibility Declaration	

Note:

- 1. The applicant may furnish any additional information, which they think necessary to establish their eligibility and capability to successfully complete the envisaged work. No information shall be entertained after last date of online submission of tenders unless it is called by the competent authority. If any information furnished by the applicant is found incorrect at a later stage, they shall be liable to be debarred from tendering /taking up of work in IPR. IPR reserves the right to verify the particulars furnished by the applicant independently and reject any application without assigning any reason. Prospective bidders shall satisfy themselves of fulfilling all the eligibility criteria before submission of the tender. The Institute reserves the right to not consider the tender documents of the bidders not fulfilling the stipulated criteria.
- 2. It is binding on the bidder to fill the data required for assessment of eligibility criteria. The technical evaluation shall be done based on the data provided and the relevant documents uploaded to support the same. In case where the relevant information is not filled in the uploaded sheets while commensurate supporting documents are uploaded, the supporting documents shall not be considered in evaluation. Therefore the bidders in their own interest shall fill all the relevant information in excel sheets and upload relevant documents. IPR shall not accept any new document after bid opening. IPR may ask for clarification and submission of documents in support of documents/information already submitted.

The above document shall be evaluated for Eligibility as per Section IV above. After evaluation of applications based on the Eligibility mentioned above, a list of technically qualified bidders shall be prepared.

(V) Bid Evaluation Method

The tender will be of Two Part system (i.e.) Part- I Technical bid and Part -II Financial bid.

I. Technical Bid:

The bidders shall be evaluated for Eligibility criteria as per Section IV above. After evaluation of applications mentioned above, a list of qualified bidders shall be prepared.

II. Price Bid:

The price should be quoted in the price bid. The technically qualified bidders shall be notified about the date and time of opening of Price bid.

The Price bid of technically qualified bidders shall only be opened.

III. Award of Work:

The lowest quoted bidder i.e. L1 bidder shall be selected.

Note:

The Bidders are to upload all the required documents on the e-Tender portal only, In case the required documents are not uploaded by the bidders or the bid does not contain information, the bidder will be summarily disqualified. The decision of Institute in regard of disqualification shall be final and binding. No claim whatsoever shall be admissible.

(VI) INFORMATION & INSTRUCTIONS FOR BIDDERS

1. The tender document may be downloaded from e-tendering website https://eprocure.gov.in/eprocure/app

Downloading of tender documents alone will not make a bidders eligible for participating in the bidding. The documents uploaded by the bidders will be subjected to verification subsequently by Department. If found not meeting the requirement, such offers will be rejected.

- 2. Tenders will be opened on the stipulated date and time specified in NIT details.
 - 3. On opening of, Technical bid, further detailed scrutiny / evaluation will be carried out. During the evaluation of technical bids, the documents furnished by the Bidders will be scrutinized in detail. Any tender, found as not fulfilling the eligibility criteria will be summarily rejected and such offers will not be considered for further processing.
- 4. The tender accepting authority is not bound to accept the lowest or any other tender and reserves the authority to reject any or all the tenders received without assigning any reason. All tenders in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the bidders shall be summarily rejected.
- 5. The tender accepting authority also reserves the right to alter the scope/ or reduce quantum of work before/ after issue of work order and the bidders shall not have any claim what so ever on this account.
- 6. The tender accepting authority reserves the right of accepting the whole or any part of the tender and the bidders shall be bound to perform the same at the rate quoted.
- 7. The bidders shall not be permitted to tender for works in the Group / Division of that of Institute responsible for award and execution of contracts for which his/her near relative is working. He/she/they shall also intimate the names of persons who are working with him/her/them in any capacity or are subsequently employed by him and who are near relatives. Any breach of this condition by the Bidders would render him liable for rejection of tender or cancellation of contract.
- 8. Canvassing directly or indirectly, in connection with tender is strictly prohibited and the tenders submitted by the bidders who resort to canvassing will be liable for rejection. Any effort on the part of the applicant or his agent to exercise influence or to pressurize the Institute would result in rejection of his bid.
- 9. The tender should be valid for minimum period of 180 days from the date of opening of Technical bid as specified in NIT above. If any bidder withdraws the offer within the validity period or makes any Construction of Shed Building for Augmentation of Workshop facility (Extension of Workshop Fabrication yard) at IPR campus.
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modifications in the terms and conditions of the tender which are not acceptable to the Institute, the bidder shall not be allowed to participate in the retendering process of the work.

10. On concluding the tender, an agreement shall be drawn with the successful bidder.

11. Earnest Money Deposit (EMD):

- 11.1 The Earnest Money Deposit amount may be submitted in the modes described below. The IPR shall not pay interest on the same in any case. The bidder is responsible for timely submission of Earnest Money Deposit, so that IPR receives the same before stipulated date and time. If the EMD submission by the bidder within the stipulated date and time is not received by the IPR due to reasons beyond control of the bidder, bid will be considered as non-responsive and rejected. If the Earnest Money Deposit submitted by bidder is less than stipulated, the bid shall be rejected. The Earnest Money Deposit to be submitted in the form of Insurance Surety Bonds or demand draft or Pay order of any Scheduled Bank in favour of INSTITUTE FOR PLASMA RESEARCH, Bhat, Gandhinagar, Gujarat. The bid can only be submitted after uploading the scanned copy of DD etc. and original should be deposited in office of Tender Inviting Authority within the period of bid submission. The bidder is solely responsible for timely deposition of Earnest Money Deposit in the correct account
- 11.2 (a) Earnest Money Deposit of qualified unsuccessful bidders shall be returned at the earliest after expiry of the final bid validity and latest on or before the 30th day after award of the contract.
 - (b) In case of two part bid, the Earnest Money Deposit of technically unqualified bidders during first stage i.e. technical evaluation etc. shall be returned within 30 days of declaration of result of first stage i.e. technical evaluation etc.
 - (c) Earnest Money Deposit of successful bidder will be returned after submission of the performance guarantee of requisite amount.
 - (d) Earnest Money Deposit of the bidder who has withdrawn the bid shall be returned after opening of the bid.
- 11.3 The Earnest Money Deposit shall be forfeited, if;
 - a. The bidder withdraws / modifies his bid or any item thereof after opening of bid.
 - b. The successful bidder fails within the specified time limit to submit the performance guarantee and commence the work.
- 11.4 The IPR at its discretion shall refund the Earnest Money Deposit by RTGS/NEFT or through any other electronic mode to the account number as registered by the bidder himself on e –tendering portal.

The bid can only be submitted after uploading the scanned copy of EMD and original should be deposited in office of e-tender officer within the period of bid submission as mentioned.

Bids received without EMD shall be summarily rejected.

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- 12. Contract Agreement shall be drawn with the successful bidder incorporating Terms & Conditions of Contract along with full set of documents, every page of which should be signed by the Bidders. Bidders shall quote his rates as per various terms & conditions of tender which will form part of the Agreement.
- 13. Bidders should submit the scanned copy of the documents mentioned in Technical bid, failing which the bidders are liable to be rejected. A check list attached in Excel format shall also be filled by the bidders indicating 'Yes/No' against each column.
- 14. Price Bid is to be separately uploaded.
- 15. The rates quoted shall include all taxes and levies payable under respective statues. This is an indivisible works contract. The rates quoted shall include all taxes including Goods and Service Tax (GST) at applicable rates and levies, duties, cess etc., payable under respective statues. Labour cess (if applicable) shall be deducted as per government rules. You should submit necessary documents in this regards at the time of raising bill. The Contractor should pay GST separately for IPR works and proof of payment receipt for the same should be submitted along with bill. Other Deductions as per statues will be effected from the bill and remitted to the Department concerned.
- 16. All information called for in the enclosed forms should be furnished against the relevant columns in the forms. If for any reason, information is furnished on a separate sheet, this fact should be mentioned against the relevant column. Even if no information is to be provided in a column, a "Nil" or "no such case" entry should be made in that column. If any particulars /queries are not applicable in case of the applicant, it should be stated as "Not Applicable". The applicants may please note that giving incomplete/ unclear information called for in the forms, or making any change in the prescribed forms, or deliberately suppressing any information, may result in disqualification of the applicant summarily. Applications duly filled in / scan copies of original shall be uploaded in web site: https://eprocure.gov.in/eprocure/app before closing date and time of online submission of tender. No applications shall be received in physical form.
- 17. The applicant may furnish any additional information, which he/she thinks is necessary to establish his/her capabilities to successfully complete the envisaged work. He/she is, however, advised not to furnish superfluous information. No information shall be entertained after submission of tender document unless the Institute calls for it.
- 18. Any information furnished by the applicant found to be incorrect either immediately or at a later date, would render him liable to be debarred from tendering/taking up of work in **IPR**.
- 19. If any clarification is required by bidder, the bidder should upload their queries on e-Tender portal before filling Tender Document. On the basis of their queries, Institute shall upload the clarification on the e-Tender portal.

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- 20. If Institute wants to provide any additional clarification it will be uploaded on the e-Tender Portal.
- 21. Prohibition against use of **IPR's** name without permission for publicity purposes: The Bidderss, or associates, or the employees engaged by the Bidders or associates shall not use **IPR's** name for any publicity purpose through any public media like Press, Radio, TV or Internet without the prior written approval of IPR.

22. **Definitions:**

- 22.1 In this document the following words and expressions have the meaning hereby assigned to them.
- 22.2 **Applicant/ Tenderer/ Bidder/ Contractor** means the firm who is filling tender / one who has been awarded the work.
- 22.3 **Year** means "Financial Year" unless stated otherwise
- 22.4 **Employer or IPR or Institute** means Institute for Plasma Research, Bhat, Gandhinagar
- 22.5 **Director, IPR** means Director, Institute for Plasma Research, Near Indira Bridge, Bhat, Gandhinagar.
- 22.6 **The Chairperson PMRC** means Chairperson of Project Monitoring and Review Committee, IPR, Bhat Gandhinagar.
- 22.7 **Dean (Admin)** means Dean Administration IPR.
- 22.8 **EIC- means Engineer- in Charge,** or his representatives who shall supervise the work.

23. Final Decision Making Authority:

The Director, IPR reserves the right to accept or reject any application/s and to annul the tender process and reject all applications at any time, without assigning any reason or incurring any liability to the applicants.

The Director, Institute for Plasma Research reserves the right to accept or reject the tenders in full or part without assigning any reason thereof.

- 24. The bidders who do not fulfil all or any of the tender conditions or if the tender is incomplete in any respect, will be summarily rejected.
- 25. Filled in Tender document with Counter terms & conditions may be rejected.
- 26. All documents relating to the bid shall be in the English or Hindi language, unless stated otherwise

27. One bid per bidder

Each bidder shall submit only one bid. A bidder who submits or participates in more than one bid will cause the bidder's participation to be disqualified for all the proposals.

28. General:

i. All information called for in the enclosed forms should be furnished against the relevant columns in the forms. If for any reason, information is furnished on a separate sheet, this fact Construction of Shed Building for Augmentation of Workshop facility (Extension of Workshop Fabrication yard) at IPR campus.

should be mentioned against the relevant column. Even if no information is to be provided in a column, a "Nil" or "no such case" entry should be made in that column. If any particulars /queries are not applicable in case of the Bidder, it should be stated as "Not Applicable". The Bidders may please note that giving incomplete/ unclear information called for in the forms, or making any change in the prescribed forms, or deliberately suppressing any information, may result in disqualification of the Bidder summarily. Applications duly filled in / scan copies of original shall be uploaded in web site: https://eprocure.gov.in/eprocure/app before closing date and time of online submission of tender. No applications shall be received in physical form.

- **ii.** The Bidder should sign each page on the application along with enclosures with rubber stamp before scanning / uploading.
- iii. Overwriting should be avoided. Corrections, if any, should be made by neatly crossing out and shall be rewritten with initials and date. Pages of the Tender document are numbered. Additional sheets, if any added by the Bidder, should also be numbered by him. They should be uploaded along with letter of transmittal.
- **iv.** References, information and certificates from the respective clients certifying suitability, technical know how or capability of the Bidder should be signed by an officer not below the rank of Executive Engineer or equivalent.
- v. The Bidder may furnish any additional information, which he/she thinks is necessary to establish his/her capabilities to successfully complete the envisaged work. He/she are however, advised not to furnish superfluous information. No information shall be entertained after submission of tender document unless the Institute calls for it.
- vi. Any information furnished by the Bidder found to be incorrect either immediately or at a later date, would render him liable to be debarred from tendering/taking up of work in **IPR**.

30. Method of Application:- Online Mode- through e-Tender Portal only.

- 30.1 If the applicant is an individual, the application shall be signed by him above his full typewritten name and current address.
- 30.2 If the applicant is a proprietary firm, the application shall be signed by the proprietor above his full typewritten name and the full name of his firm with its current address.
- 30.3 If the applicant is a firm in partnership, the application 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 Construction of Shed Building for Augmentation of Workshop facility (Extension of Workshop Fabrication yard) at IPR campus.

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application. In both cases a certified copy of the partnership deed and current address of all the partners of the firm should accompany the application.

- 30.4 If the applicant is a limited company or corporation, the application shall be signed by a duly authorised person holding power of attorney for signing the application accompanied by a copy of the power of attorney. The applicant should also furnish a copy of the Memorandum of Articles of Association duly attested by a Public Notary.
- 30.5. In all the scenario the applicants should upload all the documents for their eligibility criteria

31. Particulars Provisional

The particulars of the work as mentioned in "Brief Particulars of the work" are provisional. They are liable to change and must be considered only as advance information to assist the applicant to apply for proposed work.

32. Site Visit & Other studies and field investigations, if any:

The applicant is advised to visit the site of work, at his/her own cost, and examine it and its surroundings by himself/herself, collect all information that he/she considers necessary for proper assessment of the prospective assignment.

- 33. **Costs associated with Visits and Field Investigations, if any:** Costs of visiting the sites, and undertaking any further studies and investigations shall be at the Firm's own expense. The Firm and any of his personnel or agents can visit sites upon prior information to Institute. The request to be made to the Tender inviting Authority.
- 34. Purchase Price Preference benefits under MSME including benefits under PPP- Make in India policy (if applicable) will be provided to the Industries as per the policies of Government of India in force at the time of evaluation of the offers provided their offer is in compliance with the terms and conditions of the tender (if it is applicable as per Government rules for this Work tender).

(VII) GENERAL RULES & DIRECTIONS

1.0 Scope of bid

The Institute for Plasma Research (referred to as IPR in these documents) invites bids for the work. The successful bidder should provide the services during the period of work as per the terms and conditions specified in the NIT, Terms and conditions and schedules mentioned in the tender document.

2.0 Eligible bidders

- 2.1 Bidding is open to all eligible bidders meeting the eligibility criteria as defined in tender. Bidders are advised to note the eligibility criteria specified in the notice inviting tender.
- 2.2 Incomplete bids and bidders not meeting the eligibility criteria shall be summarily rejected. It may be noted that mere submission of bid does not imply that your offer shall be considered. Tenders are considered only after IPR themselves assess the document submitted along with the bid by the bidder meets the eligibility criteria as specified in notice inviting e-tender during evaluation of bid.
- 2.3 The bidder who has been blacklisted / de-registered by IPR/ DAE, or any other government department shall not be eligible for participation in tenders of IPR.

3.0 Cost of bidding

3.1 The bidder shall bear all costs associated with the preparation and submission of his bid and the Institute will in no case be responsible and liable for these costs.

4.0 Content of bidding documents

- 4.1 Submission of a bid by a bidder implies that he/she has read this notice and all other contract documents, clarification, addendum, corrigendum and has made himself/herself aware of the scope and terms and conditions of the work to be executed.
- 4.2 The bidder shall submit the bid, which satisfies each and every condition laid down in the bid documents, failing which, the bid is liable to be rejected.
- 4.3 The documents listed below comprise one set of bid document:
 - Technical Bid
 - Price Bid

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5.0 Pre-bid Clarification: As per detailed NIT.

6.0 Amendment of bid documents

- 6.1 Before the deadline for submission of bids, the IPR may modify the bidding documents by issuing addenda on web site.
- 6.2 Any addendum so issued shall be part of the bid documents as well as contract document.
- 6.3 To give prospective bidders reasonable time to take an addendum into account in preparing their bids, the IPR may extend the date for submission of bids, if necessary.
- 6.4 Corrigendum, addendum or any other information regarding tender shall be uploaded only on web site. Hence, the bidders are requested to visit the web site https://eprocure.gov.in/eprocure/app regularly. The above documents shall become part of bid and agreement. Submission of bid shall imply that bidder has noted and accepted content of all the corrigendum/addendum/clarifications and affect of same has been included in price bid.

7.0 Language of the bid

7.1 All documents relating to the bid shall be in the English & Hindi language, unless stated otherwise.

8.0 Bid prices, rates & taxes

- 8.1 The bidder should quote as Lump sum for the job in the Price Bid
- 8.2 The rates, prices and total bid price submitted by the contractor shall be inclusive of all materials, Labour, Statutory authority fees etc. complete including terminal or other duties, GST, VAT, CST, turnover tax, work contract tax, octroi, cess, or any other similar tax applicable under the existing laws or levy by the statuary authorities/state/central government in performance of this contract including GST.

This is an indivisible works contract. The rates quoted shall include all taxes including Goods and Service Tax (GST) at applicable rates and levies, duties, cess etc., payable under respective statues. Labour cess (if applicable) shall be deducted as per government rules. You should submit necessary documents in this regards at the time of raising bill. You should pay GST separately for IPR works and proof of payment receipt for the same should be submitted along with bill. Other Deductions as per statues will be effected from the bill and remitted to the Department concerned.

8.3 Tax deduction at source

At the time of its payments due to the Bidder under this contract, the statutory deduction of Income Tax at source (IT TDS) & GST TDS, shall be made from time to time as may be required by the Government of India.

IPR shall provide the TDS certificate to Bidder.

9.0 Currencies of bid and payment

9.1 The unit rates and the prices shall be quoted by the bidder in Indian rupees, unless otherwise specified in the Tender.

10.0 Bid validity

10.1 The bids submitted shall remain valid for acceptance for a period of **180 days** from the date of opening of the Technical bid. The bidder shall not be entitled during the period of validity, to revoke or cancel his bid or vary / modify the bid given or any item thereof. In case of bidder revoking or cancelling his bid, varying any terms in regard thereof, the bidder shall be banned from participating in the Tender process of the Institute

11.0 Proposal by bidders

11.1 Bidders shall submit offers that comply with the requirements of the bidding documents. No modification in the bid document or alternate bid proposal will be accepted.

12.0 Submission of the bids

- 12.1 The date and time of on-line bid submission shall remain unaltered even if the specified date for the submission of the bid is declared as holiday for the office inviting tender.
- 12.2 The IPR may extend the deadline for submission of bids by issuing an amendment, in which case, all rights and obligations of the corporation and the bidders previously subject to the original deadline will then be subject to the new deadline.
- 12.3 Any bid received by the IPR after the deadline prescribed above will be rejected.

- 12.4 The bidders shall note the following before submission of bid
 - (a) If the digital signature certificate (DSC) holder is sole proprietor of the firm, power of attorney need not be submitted.
 - (b) In case DSC holder is bidding on behalf of partnership firm, power of attorney or any other legally acceptable document viz. partnership deed, board resolution etc authorizing DSC holder to bid on behalf of the bidder is to be uploaded. In case of non-submission, the bid shall be summarily rejected.

13.0 Bid opening

- 13.1 Tender opening shall be done on-line. On opening, the Bidders can see their bid status. The authorized representative of Bidders may remain present (if so desires) during opening of Bid. The authorized representative should have valid photo identity and original authority letter issued by competent authority of their company. If the date of opening is declared as holiday then bid will be opened on next working day. In exceptional cases opening of tenders can be done on any day or time after scheduled date and time of opening. Corrigendum issued for opening of tender shall be uploaded on website.
- 13.2 The bids without stipulated EMD amount and other mandatory documents as per NIT shall be summarily rejected.
- 13.3 In Two part tenders financial bids of only technically qualified bidders shall be opened.

14.0 Clarification of bids

- 14.1 To assist in the examination and comparison of bids, the IPR may, at its discretion, ask any bidder for clarification of his/her/their bid, including breakup of quoted fees. The request for clarification and the response shall be in writing or by email / fax, but no change in the price or substance of the bid shall be sought, offered, or permitted. If the bidder does not respond within the stipulated time, then the bid of the bidder will be evaluated on its own merit.
- 14.2 Bidder shall not contact the IPR on any matter relating to his bid from the time of the bid opening to the time the contract is awarded.
- 14.3 Any effort by the bidder to influence the IPR bid evaluation, bid comparison or contract award decisions, may result in the rejection of his bid.

15.0 Examination of bids and determination of responsiveness

- 15.1 Prior to detailed evaluation of bids, the IPR will determine whether each bid(s) meets
 - (a) The Initial Criteria for Eligibility.
 - (b) Is accompanied by the required Earnest Money Deposit.
 - (c) Is responsive to the requirements of the bidding documents
 - (d) Has been properly signed by authorized signatory as per clause-13.4.
- 15.2 A responsive bid is one which conforms to all the terms and conditions.

16.0 Notification of award and signing of agreement

- 16.1 The bidder whose bid has been accepted will be notified of the award by the IPR prior to expiration of the bid validity period by issue of work order. The notification may also be made through letter of intent, wherein the work order shall follow.
- 16.2 The details of award can be seen on web site.
- An agreement shall be made and signed by both the parties. The agreement will incorporate all correspondence between the IPR and the successful bidder, bid documents etc. The bid document as uploaded on website https://eprocure.gov.in/eprocure/app shall be forming part of agreement. The successful bidder shall be responsible for compliance at his own cost with the stamp duty act of the state where the agreement is being executed. The non-judicial stamp paper of appropriate value after adjudication shall be submitted by the successful bidder at his own cost.

17.0 Corrupt or fraudulent practices

- 17.1 The IPR requires that bidders under this contract, observe the highest standard of ethics during execution of this contract. In pursuance of this policy, the IPR:
 - (a) defines, for the purpose of these provisions, the terms set forth below as follows:
 - (i) "corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution; and
 - (ii) "fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the IPR, and includes collusive practice among bidders (prior to or after bid submission) designed

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to establish bid prices at artificial non-competitive levels and to deprive the IPR of the benefits of free and open competition.

(b) will reject a proposal for award of work if it determines that the bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question.

(c)will declare a bidder ineligible, either indefinitely or for a stated period of time, to be awarded a contract / contracts if at any time it determines that the bidder has engaged in corrupt or fraudulent practices in competing for, or in executing, the contract.

17.2 The bidder may make representation in connection with processing of tender directly and only to the competent authority (calling tender) as mentioned in the tender document. However, if such representation is found to be un-sustentative and/ or frivolous and if the tender has to be closed because of the delays / disruptions caused by such representations and the job has to be re-tendered, then such bidder will not be allowed to participate in the re-invited tender.

In case, any bidder while making such representation to competent authority also involves other officials of IPR and / or solicits/ invokes external intervention other than as may be permitted under the law and if the tender has to be closed because of the delays / disruptions caused by such interventions and has to be re-tendered, then the particular bidder will not be allowed to participate in the re-invited tender.

18.0 Disclosures

Any change in the constitution of the bidders' firm, where it is a partnership firm, as declared in the bid should be disclosed to the IPR, at any time between the submission of bids and the signing of the contract.

- 19.0 Estimated Cost is given merely as a rough guide.
- 20.0 The bid submitted shall become invalid and cost of bid & e-Tender processing fee shall not be refunded if:
 - (i) The bidders is found ineligible.
 - (ii) The bidders do not upload all the documents as stipulated in the TENDER document.
 - (iii) If any discrepancy is noticed between any submitted documents by the bidder.
- 21.0 The contractor shall not be permitted to bid for works in the IPR, responsible for award and execution of contracts, in which his near relative is posted as equivalent to Accounts Officer or as an officer in the capacity of grades Scientific/Technical Officer "C" and above. He/She shall also intimate the

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names of persons who are working with him/her in any capacity or are subsequently employed by him/her and who are near relative to any officer in the Institute for Plasma Research. Any breach of this condition by the contractor would render him/her liable to be barred from tendering in the Institute.

- 22.0 No Engineer of Gazetted rank or other Gazetted Officer employed in Engineering or Administrative duties in an Engineering Department of the Government of India is allowed to work as a bidder / employee of bidder for a period of **one** year after his retirement from Government Services, with out the previous permission of the Government of India in writing. This contract is liable to be cancelled if either the bidder or any of his employees is found at any time to be such a person who had not obtained the permission of the Government of India as aforesaid before submission of the tender or engagement in the contractor's service.
- 23. The bidders shall follow all guidelines related to pandemic issued by the Government of India from time to time. Strict compliance should be adhered to all instructions related to the same.
- 24. In case the lowest tendered amount of two or more contractors is same, then such lowest contractors may be asked to submit sealed revised offer quoting rate of each item of the schedule of quantity for all sub sections /sub heads as the case may be but the revised quoted rate of each item of schedule of quantity for all sub sections /sub heads should not be higher than their respective original rate quoted already at the time of submission tender. The lowest tender shall be decided on the basis of revised offer.

If the revised tendered amount of two or more contractor received in revised offer is again found to be equal, then the lowest tender, among such contactors, shall be decided by "draw of lots" in the presence of Chairperson/ (Dean Admin) and the lowest contractors, those who have quoted equal amount in their tenders.

In case of any such lowest contractor in his revised offer quotes rate of any item more than their respective original rate quoted already at the time of submission of tender, then such revised offer shall be treated invalid. Such case of revised offer of the lowest contractor or case of refusal to submit revised offer by the lowest contractor shall be treated as withdrawal of his tender before acceptance and 50 % of his earnest money shall be forfeited.

In case all the lowest contractors those have same tendered amount (as a result of their quoted rate of individual items), refuse to submit revised offers, then tenders are to be recalled after forfeiting 50% EMD of each lowest contractors.

Contractors, those earnest money is forfeited because of non-submission of revised offer or quoting higher revised rate(s) of any item (S) than their respective original rates quoted

already at the time of submission of bid shall not be allowed to participate in the retendering process of work.

- 25. The executive control of the work, as far as this agreement is concerned, on behalf of the Institute shall be with any officer/s who may be authorized or prescribed by Institute on their behalf. Contractor shall address communications to the officer who may be authorized on their behalf who shall cause appropriate action to be taken on them. Similarly, the Contractor shall act only on written communication, in case of an emergency, on oral communication, which is to be confirmed thereafter in writing from the officer authorized on their behalf.
- 26. Contractor will not make publicity / presentation of the Drawings / Project / Layouts to any other Parties or media without prior written consent of Institute.
- 27. Contractor shall prepare all designs confirming to relevant Bureau of Indian Standards, National Building Code & in accordance with byelaws / acts other regulations of Statutory Bodies.

(VIII) GENERAL TERMS AND CONDITIONS

1. Sub-letting / Sub-Contracting of professional services

No sub-letting/ Sub-contracting of services shall be permitted by the Institute.

2. Third Party Liability

The Institute shall not be liable for any injury / death, caused to any official, employee, representative or agent of the Contractor or their contractors working at the site or damage to their properties for any reason whatsoever and Institute shall not entertain any claim from any person on that behalf. It would be the responsibility of the Contractor to get their officials, employees, representatives, agents or their contractors insured against the possible risks involved in the discharge of their duties at the work site.

3. Confidentiality

The Contractor and their representatives shall not any time communicate to any person or entity any confidential information disclosed to them for the purpose of the services. The Contractor shall not publicise any information pertaining to Institute which is discussed with them during course of execution of work in the interest of project completion.

4. Time period

The successful Tenderer shall commence the work within 15 days from the date of award and the work shall be completed in all respect within (485 days) **16 Months** from the date of receipt of work order excluding mobilization period of 15 days.

5. Secrecy:

The Contractor shall not disclose any information furnished to them by the employer nor any drawings, reports and any other information prepared by the Contractor without the prior written approval of Institute except in so far as disclosure is necessary for the performance of Contractor's work and service under this agreement. The Contractor shall be subject to the

provision of the official Secrets Act 1923, and amendments thereof pertaining to such information at all times.

6. PAYMENT

Payment shall be made to the contractor as per the following schedule:

Payment of interim bill:

The running bill in duplicate shall be prepared by the contractor after achieving of the particular stage mentioned in the schedule of payment for the work actually done, in Performa approved by engineer in charge along with documentary evidence. The Contractor shall forward the running bill to the Dean (Admin) through Engineer in charge.

The running account bill amounts will be regarded as advance payments against the final bill payment and not for the work actually done and completed and shall not relieve the Contractor of its responsibility for rectification required of the bad, unsound, imperfect, unskilled, defective work to be removed, taken away and reconstructed.

The contractor shall achieve the scheduled stage of project to raise the bill. The minimum percentage of bill shall be at least 15% of the accepted Tender cost to raise the bill. However the EIC shall consider request for interim release of bill value < 15% as well, on case to case basis, the decision of EIC in this regard shall be binding on Contractor.

Final Bill:

After completion of work and compliance of all the terms and conditions of tender the Contractor shall forward the final bill along with documentary evidence to the Dean (Admin) through Engineer in charge. Institute shall release payment of final bill within 60 days after submission of final bill.

7. Covid-19 protocol and guidelines :

All Coivd-19 protocol and guidelines issued by Government from time to time shall be followed strictly by the contractor.

8. SECURITY REGULATIONS:

The contractors have to strictly follow the regulations of the Institute at the work site regarding entry of personnel, material etc. and any other regulation that might be enforced from time to time. All materials and articles brought by the contract to the work site shall have to declare at the security gate. Similarly no materials shall be taken out from the Institute premises without proper gate pass, which will be issued by the Engineer-in-Charge to the contractor on written request. It is to be noted that loading of contractor's materials in vehicles and trucks shall be done in the presence of Institute personnel. The contractor's representative will have to escort the materials till the security check is over.

The contractors, suppliers, vendors, workers engaged in work/business will be issued with renewable entry permit to avoid unauthorized entry in the Institute premises/site on scrutiny of applications in prescribed form.

For working on Sundays, Holidays and late hours even though permission will be accorded by the Engineer-in-Charge, the contractor will have to make application to the Institute and keep them informed well in advance.

The area where the proposed work is to be carried is area under the control of Security authorities of Institute. Entry to the site of work shall be through the main gate of Institute only. The contractor shall follow strictly the security regulations of the Institute at site of work regarding entry of personnel, materials etc. and other regulations of the Institute that might be enforced from time to time at the work site and also in the campus for smooth and efficient operation. The Contractor, his agents, representatives, workmen etc and his materials, carts, trucks or other means of transport etc, will be allowed to enter through and leave from such point of entry/exit at such times, the authorities incharge of the area at their sole discretion may permit.

The contractor, his agents and representatives are required to be in possession of the individual identity /muster cards passes. The muster cards or passes are examined by the security staff at the time entry/exit inside the Institute area and also at any time or number of times within such area.

The contractor will have to apply for entry/muster permits of likely number of labour to be engaged during the week for the workers and authorize their representatives to collect the entry permits for labour from the Institute Authority.

It will be the responsibility of the contractor to maintain the list of labourers permitted to work inside the premises a register and the representative of contractor's labour will have to issue entry pass to each labour after making necessary entry in the registers. The contractor, his agents, representatives, workmen shall strictly observe the orders pertaining to fire precautions prevailing within the area.

In addition to the above, other regulations as may be imposed by the security authorities / Engineer-In charge shall be complied with / observed by the contractor and his workmen.

Any breach of above security regulations and rules in force from time to time will be viewed seriously. No claim whatsoever will be entertained by the department on account of the observations of the Security regulations.

Special Notes:

- (a) The Contractor should submit an undertaking to assume responsibility in respect of all the workers / persons deployed by him at site. In case, if it is more than 15 days, a copy of police verification certificate in respect of those all labours / persons to be deployed at site should be furnished along with undertaking well in advance.
- (b) The entry and exit of contractor's labours / workers / persons should be in presence of contractors authorized supervisor who will issue muster / entry passes/ identity card after proper entry in the muster at the main gate.
- (c) It will be the responsibility of the contractor for proper safety and security of their materials including materials & laborer's for which secured advances have been given by the Institute at his own cost.
- (d)The contractor should ensure that his workers / personnel should not enter in to the other area of Institute campus other than specified as site.
- (e) No housing colony/ labour colony will be permitted inside Institute campus. Any person/labour will not be allowed to stay inside the Institute campus after working hours.
- (f) No staff or worker of the contractor will be permitted to enter the premises without valid photo Identity card / entry pass duly attested by the Administrative officer of IPR.

9. Safety Clause:

Contractor to follow all the guidelines as per the safety Codes of the Institute which is available for free view and download from the Institute website. All the provisions of the safety clauses must be adhered to during the work.

(IX) Schedule of Payment

The payment shall be released in stages as mentioned below:

Sr.	Description of Stage	Percentage of the total
No		amount as per issued
		Work order by IPR
1	Upon submission of preliminary / Good for	
	construction Detailed Design Drawings of	
	Building including all utility services to IPR.	
	a) On submission of Architectural /	1.5%
	Structural / Internal & External Electrical	
	drawings of the building.	
	b) On submission of drawings of all	0.5%
	services i.e Plumbing, HVAC, Mechanical,	
	Fire-fighting and other services pertaining to	
	Building.	
2	Upon submission of all statutory permissions for	
	a. Pre Construction	1.5 %
	b. During Construction to IPR.	0.5%
3	Upon completion of Foundations and works up to	
	Plinth at site.	
	a) All structural works upto plinth level Including	20%
	Plinth filling and PCC.	
	b. Upon Completion of RCC Floor works	5%

4	Upon completion of Superstructure Civil &	
	Structural work and finishing works in all respect	
	at site.	
	a) Upon Completion of erection of steel column/	10%
	Beams/ Truss/ purlins and Rafters etc.	
	b) Upon Completion of Roof Panelling sheet/ Wall	
	panelling sheet, including flashings, Rain water	10%
	gutter ,ridges etc.	
	c) Upon completion of SITC of EOT crane, Rolling	
	shutters and other related mechanical work.	7%
	d) Upon Completion of Entire Superstructure work	
	including the modification works, internal	
	external finishing works etc.	12%
5	Upon completion of all Internal and External Utility	
	services at site.	
	a. Upon Completion of RCC road, storm water	5 %
	drain including curbing etc.	
	b. Upon completion of internal / external PH	5%
	services including Sewer line connection, fire	
	fighting detection and safety works.	
	c. Completion of all internal and External Electrical	10%
	works, HVAC works.	
6	Upon submission of all Statutory Permission for	2%
	Building Use and any other permissions from Local/	
	State / Central Govt. Statutory bodies to IPR.	
7	Upon Handing over and taking over of facility for use	10%
	by IPR and submission of all the documents /	
	completion drawing related to the project to IPR	

Note:- This is an indivisible works contract. The rates quoted shall include all taxes including Goods and Service Tax (GST) at applicable rates and levies, duties, cess etc., payable under respective statutes. Labour cess (if applicable) shall be deducted as per government rules. The necessary documents in this regards should be submitted at the time of raising bill. You should pay GST separately for IPR works and documentary proof of payment receipt for the same should be submitted along with bill. Other Deductions as per statutes will be effected from the bill and remitted to the Department concerned.

(X) TIME SCHEDULE FOR PROJECT

The total time period for completion of entire work including Design, obtaining Statutory permissions, Construction (Build) to make facility for use and Transfer to Institute for Plasma Research (IPR) shall be 16 Months from the date of start of Work as per work Order.

The various stages and its completion time are enumerated below.

Sr. No	Description of Stage	Time period in Months from the date of start of Work as per work Order. (*T0)
1	Submission of Preliminary design drawings, Detailed	T0+ 2 (Two) Month
	Design Drawings Building including all utility services	
	to IPR.	
2	Submission of all statutory permissions for commence of	T0+4 (Four) Months
	Construction work to IPR.	
3	Completion of Foundations and works up to Plinth at	T0+7 (Seven) Months
	site.	
4	Completion of Superstructure Civil & Structural work	T0+ 14 (Fourteen) Months
	and finishing works in all respect at site.	
5	Completion of all Internal and External Utility services	T0+ 14 (Fourteen) Months
	at site.	
6	Completion of work in all respect	T0+ 15 (Fifteen) Months
7	Handing over of facility for use and submission of all the	T0+ 15 (Fifteen) Months
	documents related to the project to IPR.	
8	Submission of all Statutory Permission for Building Use	T0+ 16 (Sixteen) Months
	and any other relevant permissions to IPR.	
	Total time period for completion of entire work	T0+ 16 (Sixteen) Months
9	including Design, obtaining Statutory permissions ,	
	Construction (Build) to make facility for use and	
	Transfer to Institute for Plasma Research (IPR)	

^{*}T0= Date of start of work as per work order.

	AFTER COMPLETION OF ENTIRE WORKS FROM THE DATE OF COMPLETION OF WORK/ HANDING OVER WHICH EVER IS LATER, OF THE BUILDING AND ALL UTILITY SERVICES TO IPR		
1	Defect Liability Period	36 Months (Three year) from the date of completion of work/ handing over whichever is later of the Building and all Utility services to IPR.	

(XI) GENERAL CLAUSES OF CONTRACT (GCC)

CLAUSE 1 (Performance Guarantee)

- i) The contractor shall submit an irrevocable Performance Guarantee of 5 % (Five percent) of the tendered amount in addition to other deposits mentioned elsewhere in the contract for his proper performance of the contract agreement, (notwithstanding and/or without prejudice to any other provisions in the contract) within the 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 Bank Guarantee, to the satisfaction of the Engineer-In-Charge. This guarantee shall be in the form of Insurance Surety Bonds, banker's cheque of any schedule bank / Demand draft of any schedule bank/pay order of any schedule bank or Fixed Deposit Receipt or Guarantee bond of any schedule bank in accordance with the from annexed hereto. In case a fixed deposit receipt is furnished by the contractor to the Institute as part of the Performance Bank 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 Institute to make good the deficit.
- ii) The Performance Guarantee shall be initially valid up to the stipulated date of completion plus 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 not make a claim under the performance guarantee except for amounts to which the Director, IPR is entitled under the contract (notwithstanding 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 the Director, IPR 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 the Engineer-in-Charge.
- iv) 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, IPR.
- v) 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 with the approval of Dean (Admin) 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.

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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 1A (Recovery of Security Deposit)

The person / persons whose tender(s) may be accepted (hereinafter called the contractor) shall permit the Institute at the time of making any payment to him for work done under the contract to deduct a sum at the rate of 2.5% of the gross amount of each running bill and final bill till, will amount to security deposit of 2.5% of the tendered value of the work.

Such deductions will be made and held by Institute 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 / or Fixed Deposit Receipts. In case a fixed Deposit Receipt of any Scheduled bank is furnished by the contractor to the Institute as a 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 government 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 Institute 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 endorsed in favor of the Institute of Plasma Research, 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 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 Lac subject to the condition that amount of such bank guarantee, except last one shall not be less than Rs. 5 Lac. 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/other work, then 50% of performance Guarantee shall be retained as Security Deposit. The same shall be returned year wise proportionately.

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 Government on account of such breach, pay as agreed compensation the amount calculated at the rates stipulated below

Compensation for delay of work @ 1.0 % per month of delay to be computed on per day basis on the accepted Tendered value.

Provided always that the total amount of compensation for delay to be paid under this Condition shall not exceed 10% 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 Dean (Admin) 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. 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 Institute /Government.

In case, the contractor does not achieve a particular milestone mentioned in schedule F, or the rescheduled milestone(s) in terms of Clauses 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. The amount so with held can be released against BG/FDR from scheduled bank of equivalent amount. However, no interest, whatsoever, shall be payable on such withheld amount.

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CLAUSE 3 (When Contract can be determined)

Subject to other provisions contained in this clause, Engineer-in-Charge may, without prejudice to his 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 unworkman 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 so that in the opinion of the Engineer-in-Charge (which shall be final and binding) he will be unable to secure completion of the work by the date for completion 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 option 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 Institute or to any other person on his behalf any gift or consideration of any kind as an inducement or reward for doing of forbearing to do or for having done of forborne to do any act in relation to the obtaining or execution of this or any other contract for Institute.
- (vi) If the Contractor shall enter in to a contract with Institute 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 shall obtain a contract with Institute as a result of wrong tendering or other non-bonafide 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 creditors 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.

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(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 piece work 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 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, Engineer-in-Charge shall have powers:

- (a) To determine the contract as aforesaid so far as performance of work by the contractor in 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 the Earnest Money Deposit, Security Deposit already recovered and Performance Guarantee under the contract shall be liable to be forfeited and shall be absolutely at the disposal of the Institute.
 - (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 or rescinded as above, shall not be allowed to participate in the tendering process for the balance work/ remaining work which may include any new items 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 /agreements 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 3A

In case, the work including planning designing and execution as per scope of Contract, cannot be started due to reasons not within the control of the contractor within 1/8th of the stipulated time for completion of work or one month whichever is more, either party may close the contract by giving notice to the other party stating reasons. In such eventuality, the Performance Guarantee of the contractor shall be refunded within 30days of closing the contract .

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

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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 works 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. However the handing over of site by the Engineer-in-Charge, in full or in part (if so provided in contract), shall be completed within two months from issue of acceptance letter. 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 Institute - without prejudice to any other right or remedy available in law, -

- **5.1.1** 5.1 As soon as possible but within 10 days of award of work submit a time program to the Engineer-in Charge. Such program shall be made in due 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'.

Further, program shall be prepared using the mutually agreed format/software or in other format/software as directed by Engineer-in-Charge. The said program shall be in direct relation to the time stated in the Contract document for completion of items of the works. It shall indicate the forecast of the dates of commencement and completion of various trades/ sections of the work and may be amended as necessary by agreement between the Engineer-in-Charge and the Contractor, within the limitations of overall time imposed in the Contract documents.

- **5.1.2** The Engineer-in-Charge shall within 10 (ten) working days of receipt of such program, make modifications, if any and communicate the approved program to the contractor.
 - (i) The Contractor shall submit a Time and Progress Chart for each milestone. The Engineer-in-Charge may within 30days 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 decision 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-

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Charge and the Contractor within the limitations of time imposed in the Contract documents, and further to ensure good progress during the execution of the work, the contractor shall in all cases in which the time allowed for any work, exceeds one month (save for special jobs for which a separate programme has been agreed upon) complete the work as per mile stones given in Schedule F.

- (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 obligation 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 the 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 Rs. 2500/-(for work costing up to Rs. 20 Crores)/Rs. 5000/-(for work costing more than Rs. 20 Crores) 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 control of both parties,

then upon the happening of any such event causing delay, the Contractor shall immediately give notice thereof in writing to the Engineer-in-Charge – for entry in the hindrance register (physical or web-based as prescribed in Schedule F but shall nevertheless use constantly his best endeavors 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 any reasons, in the opinion of the contractor, by the Department or for someone for whose action the Department is responsible, the contractor shall immediately give notice thereof in writing to the Engineer-in-Charge in the same manner as prescribed under sub Clause 5.2 seeking extension of time or rescheduling of milestone/s. 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 after due consideration of the same within 30 days of receipt of such request. In event of non-application by the contractor for extension of time, Dean (Admin) after affording opportunity to the contractor may give, supported with a programme, a fair and reasonable extension within a reasonable period of occurrence of the event.

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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 (Appendix-XVI) or Form of application by the contractor for seeking extension of time (Appendix -XVII) 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 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. Such extension or rescheduling of the milestones shall be communicated to the Contractor by the authority as indicated in Schedule 'F' in writing, within 30 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 Dean (Admin) 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 Dean (Admin), 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 Dean (Admin) 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 (Measurement of Work Done) -Not Applicable

CLAUSE 6A (Computerized Measurement Book)

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

All measurements as per thestage payments mentioned in shedule 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 department so that a complete record is obtained of all the stages of works performed under the contract.

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

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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.

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.

The final, fair, computerized measurement given by the contractor duly bound, with its pages machine numbered should be 100% correct, and no cutting or over writing 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 department. Thereafter the MB shall be taken in the Divisional 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 Division office for Payment. The contractor shall submit two spare copies of such computerized MBs for the purpose of reference and record by the various officers of the department.

The contractor shall also submit to the Institute 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 Institute and allotted a number as per the computerized record in the same way as done for the measurement book meant for measurements.

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.

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.

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

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contractor's expense or in default thereof no payment or allowances shall be made for such work or the materials with the same was executed.

Engineer- in-charge or his authorized representative may cause either themselves or through another officer of the Institute to check the measurements recorded by contractor and all provisions stipulated herein above shall be applicable to such checking of measurements or levels.

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 defects liability period.

CLAUSE 7 (Payment on Intermediate Certificate to be regarded as Advances)

No payment shall be made for work, estimated to cost Rupees One Lac - or less till after the whole of the work shall have been completed and certificate of completion given. For works estimated to cost over one lac, 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 Institute 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. The amount admissible shall be paid by 10th working day after the day of presentation of the bill by the Contractor to the Engineer-in-Charge or his Asst. Engineer together with the account of the material issued by the Institute, or dismantled materials, if any. In the case of works outside the headquarters of the Engineer- in-Charge, the period of ten working days will be extended to fifteen working days.

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.

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 Institute 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.

The Engineer-in-Charge in his sole discretion on the basis of a certificate from the Assistant Engineer to the effect that the work has been completed up to the level in question make interim Construction of Shed Building for Augmentation of Workshop facility (Extension of Workshop Fabrication yard) at IPR campus.

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advance payments without detailed measurements for work done (other than foundations, items to be covered under finishing items) up to lintel level (including sunshade etc.) and slab level, for each floor working out at 75% of the assessed value. The advance payments so allowed shall be adjusted in the subsequent interim bill to be submitted by the contractor within 10 days of the interim payment. In case of delay in submission of bill by the contractor a simple interest @ 10% per annum shall be paid to the Institute from the date of expiry of prescribed time limit which will be compounded on yearly basis. **Payments in Composite Contracts:** In case of composite tenders, running payment for the major component shall be by Engineer-In-Charge of major discipline to the main contractor. Running payment for minor components shall be recommended by the Engineer-in Charge of the discipline of minor component directly to the main contractor.

In case main contractor fails to make the payment to the 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, Engineer in charge of minor component shall serve the show cause to the main contractor and if reply of main contractor either not received or found unsatisfactory, he may make the payment directly to the contractor associated for minor component as per terms and conditions of the agreement drawn between main contractor and associate contractor fixed by him, Such payment made to the associate contractor shall be recovered by Engineer-in-Charge of major or minor component from the next RA/ final bill to main 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 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 they 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 fails 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 off 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 or final cleaning work as aforesaid except for any sum actually realized by the sale thereof.

CLAUSE 8 A (Contractor to keep Site Clean)

When the annual repairs and maintenance of works are carried out, the splashes and droppings from white washing, colour washing, painting etc., on walls, floor, windows, etc. shall be removed

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and toe surface cleaned simultaneously with the completion of these items of work in the individual rooms, quarters or premises etc. where the work is done without waiting to the actual completion of all the other items of work in the contract. In case the contractor fails to comply with the requirements of this clause, the Engineer-in- Charge shall have the right to get this work done at the cost of the contractor either departmentally or through any other agency. Before taking such action, the Engineer – in - Charge shall give ten days' notice in writing to the contractor.

CLAUSE 8 B (Completion Plans to be Submitted by Contractor)

The Contractor shall submit completion plan for Internal and External Civil, Electrical and Mechanical Services within thirty days of the completion of the work.

In case, the contractor fails to submit the completion plan as aforesaid, he shall be liable to pay a sum of 0.1% of Tendered Value or limit prescribed in Schedule F , Whichever is more as may be fixed by the Institute and in this respect the decision of the Institute shall be final and binding on the contractor.

The Contractor shall submit completion plan 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.

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. Payments of those items of the bill in respect of which there is no dispute and of items in dispute, for quantities and rates as approved by Engineer-in-Charge, will, as far as possible be made within the period specified here in under, the period being reckoned from the date of receipt of the bill by the Engineer-in- Charge or his authorized Asst. Engineer, complete with account of materials issued by the Institute and dismantled materials.

i) If the Tendered value of work is up to Rs.45 lakhs: :2 months

ii) If the Tendered value of work is more than Rs.45 lakhs and up to Rs.2.5 Crore:3 months

iii) If the Tendered value of work exceeds Rs.2.5 Crore: :6 months

CLAUSE 9 A (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 Institute or his signature on the bill or other claim preferred against Institute before settlement by the Engineer-in-Charge of the account or claim by payment to the bank, registered financial, Co-operative 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

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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 vise-verse the Director, IPR.

CLAUSE 10 (Materials Supplied by the Institute) - Not Applicable

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 Institute.

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-in-Charge 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 analyzed 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 and bear all charges and cost of testing unless specifically provided for otherwise elsewhere in the contract or specifications. 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 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

- (i) Secured Advance on Non-perishable Materials
- (ii) Mobilization Advance: (Not applicable)

CLAUSE 10 CA (Payment due to variation in prices of materials after receipt of tender) (not applicable)

CLAUSE 10 CC (Payment due to Increase/Decrease in Prices/Wages (Excluding materials covered under clause 10 CA) after receipt of Tender for works) (Not applicable)

CLAUSE 10D (Dismantled Material of Institute Property)

The contractor shall treat all materials obtained during dismantling of a structure, excavation of the site for a work, etc. as Institute's property and such materials shall be disposed off to the best advantage of the Institute 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, and instructions that are not included in the standard specifications of works 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 scope of work as defined in the contract 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 (save except clause 13) 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 any change in the scope of work as

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defined in the contract 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 Payment of deviations/variations beyond 0.25% of the accepted tendered amount.

In case there is any change in scope as defined in the contract, the contractor shall carry out the changes as per direction of Engineer in Charge and nothing extra shall be payable to the contractor on account of same if the additional cost of such work is up to 0.25% (zero point two five percent) of the accepted tendered amount and worked out as per sub-clause 12.3 below. Variations/deviations upto 0.25% (zero point two five percent) of the accepted tendered amount shall be deducted from overall variations/ deviations for making payment.

12.3 DETERMINATION OF RATES

In the event, there is any deviations/variations in work as defined in the contract, the contractor shall submit the complete proposal to Engineer-in-charge within 15 days duly supported with:-

- (a) Analysis of rates for items involved, along with relevant documents, rates of materials, tools/plants and labour, etc.
- (b) The impact, if any, which the deviations/variations is likely to have on the project completion schedule,

On receipt of such proposal, either individually or covering group of items, the Engineer- in-charge shall examine the proposal regarding its admissibility and finalize the proposal/rates within 45 days after receipt of proposal with all requisite details and documents from the contractors, after giving due consideration to the proposal, analysis and rates of materials and labours, etc.

12.3.1 In case of either non-submission of timely proposal or incomplete proposal by the contractor for deviations/variations, the Engineer-in-Charge shall give final opportunity to the Contractor to submit the complete proposal for change of cost within next 15 days. In case of non-submission or further incomplete submission by the contractor within the stated period, the Engineer-in-Charge shall initiate the proposal and decide the change of cost. In such case the proposal finalized by the Engineer-in-Charge shall be final and binding on the contractor.

12.3.2 Restrictions on Deviations/Variations

(i) Work(s) due to deviations/variations shall be executed only after getting the instructions Construction of Shed Building for Augmentation of Workshop facility (Extension of Workshop Fabrication yard) at IPR campus.

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- of Engineer-in-charge, save except to meet any work of emergent nature.
- (ii) Notwithstanding anything to the contrary in this clause 12, any change arising from default of the contractor in the performance of his obligations under this agreement shall not be deemed to be deviations/variations, and shall not result in any adjustment of the contract price or the project completion schedule.
- (iii) If the item of work as stipulated in the schedule of quantity/scope of work deviates on minus side, then the amount for such deviated quantity shall be deducted proportionately at the agreement rate from the accepted Tendered value.
- 12.4 Any operation incidental to or necessarily has to be in contemplation of tenderer while filling tender, or necessary for proper execution of the item included in the scope of work, whether or not, specifically indicated in the description of the item and the relevant specifications, shall be deemed to be included in the amount quoted by the tenderer or the amount given in the said scope of work, 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 the 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) Institute shall have the option to take over 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, Institute 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 Institute, 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) If any materials supplied by Institute are rendered surplus, the same except normal wastage shall be returned by the contractor to Institute at rates not exceeding those at which these were originally issued less allowance for any deterioration or damage which may have been caused whilst the materials were in the custody of the contractor. In addition, cost of transporting such materials from site to Institute stores, if so required by Institute, shall be paid.
- iv) 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.

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v) 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), (iv) and (v) 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 Institute 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 Institute 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 180 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 contractor,

- (i) At any time makes default during <u>currency of work</u> or does not execute any part of the work with the due diligence and continues to do so even after a notice in writing of 7 days from the Engineerin-Charge; or
- (ii) Commits default to 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 in that behalf by the Engineer-in-Charge; or
- (iii) Fails to complete the works 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 a notice given in writing in that behalf by the Engineer-in-Charge;

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 Institute, 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 items(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

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suffered by Institute 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 the Institute in completing the part works/part incomplete work of any item(s) or the excess loss or damages suffered or may be suffered by the Institute as aforesaid after allowing such credit shall without prejudice to any other right or remedy available to Institute in law or as per 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 claims to compensation for any loss sustained by him by reason of his having purchased any materials or entered into any engagements or made any advance on any account or with 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;

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- (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 the Institute or where it affects whole of the works, as an abandonment of the works by the Institute, shall within ten days of expiry of such period of 15days 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 the Institute, 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 Institute or any organization engaged by the Institute 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 Institute 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 before issuance of completion certificate (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

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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 or any amount due to the contractor 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 maintenance period) I

17.1 During progress of work

If the contractor or his working staff or workers damage any part of the work in the scope of contract, or any building, road, road kerb, fence, enclosure, water pipe, cables, drains, electric or telephone post or wires, trees, grass, grassland, cultivated ground, etc. contiguous to the premises on which the work or any part of it is being executed, the contractor shall make good the same at his own cost.

Contractor shall repair/replace and restore the damaged structures/services in a time bound manner as required and as directed by the Engineer-in-Charge. Contractor shall not be given any benefit of hindrance caused in the execution of the work owing to such damaged structure/service and time taken in its restoration by the contractor.

17.2 During defect liability period

The contractor shall be responsible for all the defects and deficiencies in the work within the scope of this contract, during the defect liability period which shall be for 3 (three) years after the date of actual completion of work as recorded by the Engineer- in-Charge. The liability of contractor for defects and deficiencies may arise due to:

- (a) Improper planning and design of the project, if in the scope of contract.
- (b) Works, Tools, Plant & Machinery, Materials or Workmanship not being in accordance with this contract.
- (c) Improper upkeep & maintenance during construction of the work.
- (d) Improper upkeep, operation and/or maintenance during defect liability period, if these are in the scope of this contract.
- (e) Failure by the contractor to comply with any other obligation under this contract.

Such defects and deficiencies shall be made good by the contractor at his own cost after getting instructions/notice from the Engineer-in-Charge within the time period specified in such instructions/notice.

However, contractor need not wait for instructions/notice from Engineer-in-Charge for rectification of defects in work which come to his notice and he should initiate action for needful rectification of defect on priority, under intimation to Engineer-in-Charge, to avoid any untoward incident.

17.3 Structural soundness

The contractor shall follow the good engineering practice for safety, serviceability and structural soundness of the building/ structure/road work etc. as covered in the scope of contract.

17.3.1 Structure design in the scope of contract

The contractor shall have obligation to rectify all defects in the structural elements or any other part of building/structure/road etc. due to design deficiency at his own cost for 10 (ten) years from the date of completion as recorded in the completion certificate by the Engineer-in-Charge. Such defects shall be made good by the contractor at his own cost after getting instructions/notice from the Engineer-in-Charge within the time period specified in such instructions/notice and as per the methodology duly approved by the Engineer-in-Charge.

17.3.2 Structure design not in the scope of contract

The contractor shall not be liable for design deficiency.

17.3.3 Liability for execution

The contractor shall be fully liable for any deficiency in structural soundness of work owing to execution of the work under the scope of this contract. The contractor shall have obligation to rectify all defects in the structural elements owing to any deficiency in execution of work at his own cost for 10 (ten) years from the date of completion as recorded in the completion certificate by Engineer-in-Charge. Such defects shall be made good by the contractor at his own cost after getting instructions/notice from the Engineer-in-Charge within the time period specified in such instructions/notice and as per methodology duly approved by the Engineer-in-Charge.

17.4 Methodology for rectification of defects

The design, methodology and quality of rectification of defects carried out by the contractor shall be as per sound engineering practice.

17.5 Contractor's failure to rectify defects as defined in the sub-clauses 17.1, 17.2, 17.3 & 17.4.

In the event that the contractor fails to repair or rectify the defect or deficiency within the period specified by the Engineer-in-Charge, the Engineer-in-Charge shall be entitled to get the same repaired, rectified or remedied at the contractor's cost and recover such amount from any dues like performance guarantee, security deposits etc. available with Engineer-in-Charge. Engineer-in-Charge may take action for debarment of contractor from tendering in the department by following due process. For inaction or failure to rectify the defects covered under sub clause 17.3 within specified time limit, the Engineer-in-Charge may also initiate legal and/or other actions under other applicable laws in addition to other remedies available in the contract.

17.6 Release of security deposit

Fifty percent (50%) of the security deposit of the contractor shall be retained for a period of 18 (eighteen) months from the date of completion of work as per completion certificate issued by the Engineer-in-Charge or till the final bill has been passed whichever is later. This balance fifty percent (50%) security deposit shall be released after completion of defect liability period.

Provided further, that the security deposit shall be released within a month of its due date as stated above only if satisfactory performance is observed during the said period and after deduction of Government dues from the contractor, if any.

CLAUSE 18 (Contractor to Supply Tools & Plants, etc.)

The contractor shall provide at his own cost all materials (except such special materials, if any, as may in accordance with the contract be supplied from the Engineer-in-Charge's stores), 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.

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 Workmen's Compensation Act, 1923, Institute is obliged to pay compensation to a workman employed by the contractor, in execution of the works, Institute will recover from the contractor, the amount of the compensation so paid; and, without prejudice to the rights of the Institute under sub-section (2) of Section 12, of the said Act, Institute 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 Institute to the contractor whether under this contract or otherwise. Institute shall not be bound to contest any claim made against it under sub-section (1) Section 12, of the said Act, except on the written request of the contractor and upon his giving to Institute full security for all costs for which Institute might become liable in consequence of contesting such claim.

CLAUSE 18 B (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, Institute 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 19 H or under the Contractors Labour Regulations, or under the Rules framed by Institute from time to time for the protection of health and sanitary arrangements for workers employed by Contractors. Institute 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 Institute under sub-section(2) of Section 20, and sub-section (4) of Section 21, of the Contract Labour (Regulation and Abolition) Act, 1970, Institute 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 Institute to the contractor whether under this contract or otherwise Institute 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 Institute full security for all costs for which Institute might become liable in contesting such claim.

CLAUSE 19 (Labour Laws to be complied by the Contractor)

The contractor shall obtain a valid license under the Contract Labour (R&A) Act 1970, and the Contract Labour (Regulation and Abolition) Central Rules 1971, 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 provision 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 Labour 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 fulfill these requirements shall attract the penal provisions of this contract arising out of the resultant non-execution of the work.

CLAUSE 19 A

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

CLAUSE 19 B (Payment of wages)

Payment of wages:

- (i) The contractor shall pay to labour employed by him either directly or through sub contractors, wages not less than fair wages as defined by the Government, 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 subcontractors 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 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 unauthorized made, maintenance of wage books or wage slips, publication of scale of wages 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-fulfillment 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.

In the case of Union Territory of Delhi, however, as the all-inclusive minimum daily wages fixed under Notification of the Delhi Administration No.F.12(162)MWO/DAB/ 43884-91, dated 31-12-

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1979 as amended from time to time are inclusive of wages for the weekly day of rest, the question of extra payment for weekly holiday would not arise.

(v)The contractor shall comply with the provisions of the Payment of Wages Act, 1936, Minimum Wages Act, 1948, Employees Liability Act, 1938, Workmen'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 the Institute against payments to be made under and for the observance of the laws aforesaid and the 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 19 C

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 IPR/ C.P.W.D. 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 of Rs.500/- 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 day 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:

- (1) The number of labourers employed by him on the work,
- (2) Their working hours,
- (3) The wages paid to them,
- (4) The accidents that occurred during the said fortnight showing the circumstances under which they happened and the extent of damage and injury caused by them, and
- (5) 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 the Institute, a sum not exceeding Rs.500/- 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.

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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 Institute and its contractors.

CLAUSE 19 F

Leave and pay during leave shall be regulated as follows

- 1. Leave:
- (i) in the case of delivery maternity leave not exceeding 8 weeks, 4 weeks up to and including the day of delivery and 4 weeks following that day.
- (ii) In the case of miscarriage up to 3 weeks from the date of miscarriage.
- 2. Pay:
- (i) In the case of delivery 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
- (ii) 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 3 (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 6 (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 19 G

In the event of the contractor(s) committing a default or breach of any of the provisions of the 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 Institute a sum not exceeding Rs.500/- for every default, breach or furnishing, making, submitting, filing such materially incorrect statements and in the event of the contractor(s) defaulting continuously in this respect, the penalty may be enhanced to Rs.500/- per day for each day of default subject to a maximum of 5 % 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 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 as "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 herein before mentioned at the cost of the contractor(s). The contractor(s) shall erect, make and maintain at his/their own expense and to 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 Engineerin-Charge shall have power to give notice in writing to the contractor(s) requiring that the said huts and sanitary arrangements be remodeled 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 19 H

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 outside Institute campus. (Note: Labour camp is not permitted inside Institute campus)

- (i) (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 sqm. (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 $1.8 \text{ m} \times 1.5 \text{ m} (6' \times 5')$ 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.
- (ii)(a) 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 sun-dried bricks, the walls should be plastered with mud gobri on both sides. The floor may be kutcha but plastered with mud gobri and shall be at least 15cm (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.
- (b) The contractor(s) shall provide each hut with proper ventilation.
- (c) All doors, windows, and ventilators shall be provided with suitable leaves for security purposes.

- (d) There shall be kept an open space of at least 7.2m (8 yards) between the rows of huts which may be reduced to 6m (20 ft.) according to the availability of site with the approval of the Engineer-in-Charge. Back to back construction will be allowed.
- (iii) 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.
- (iv) The site selected for the camp shall be high ground, removed from jungle.

(v) 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.

- (vi) **Drainage The** contractor(s) shall provide efficient arrangements for draining away sludge water so as to keep the camp neat and tidy.
- (vii) The contractor(s) shall make necessary arrangements for keeping the camp area sufficiently lighted to avoid accidents to the workers.
- (viii) **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 19 I

The Engineer-in-Charge may require the contractor to dismiss or remove from the site of the work any person or persons in the contractors' 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 have 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 19 J

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 10% of tendered value of work may be imposed

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by the Dean (Admin), IPR whose decision shall be final both with regard to the justification and quantum and be binding on the contractor.

However, the Dean (Admin) IPR, 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 / semiskilled tradesmen who are qualified and possess certificate in particular trade from CPWD Training Institute / Industrial Training Institute /National institute of Construction Management & Research (NICMAR) / National Academy of Construction, CIDC or any similar reputed and recognized institutes 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 each respect of the trade, it's scheduling and list of qualified tradesman along with requisite certificates 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 tradesman 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 the contractor at the rate of Rs.100 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.

CLAUSE 19L (Contributions 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.

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 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 Institute 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, IPR shall have power to adopt the course specified in Clause 3 hereof in the interest of Institute and in the event of such course being adopted, the consequences specified in the said Clause 3 shall ensue.

CLAUSE 22 QUALITY ASSURANCE AND SUPERVISION FOR EXECUTION PART of WORK

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22.1 Quality of Materials and Workmanship

- (i) The Contractor shall ensure that the Materials and workmanship are in accordance with the requirements specified in this Agreement, Specifications and Standards and Sound Engineering practice. The work shall be of the specified quality and standard, both in respect of ingredients as well as the intended functions it is supposed to perform for service life.
- (ii) The Contract warrants that all Materials shall be new, unused, not reconditioned, unless otherwise allowed as per contract or by Engineer-in-Charge, and in conformity with Specification and Standards, Applicable Laws and Sound Engineering Practice, and that the Contractor shall not use any materials which are generally recognized as being deleterious under Sound Engineering Practice

22.1.2 Quality Assurance System

The Contractor shall devise a quality assurance mechanism to ensure compliance with the provisions of this Agreement (the "Quality Assurance Plan" or "QAP").

- i. The Contractor shall, submit to the Engineer-in-Charge, its Quality Assurance Plan 15 (fifteen) days in advance of start of the execution stage specified in the NIT. The Engineer-in-Charge shall convey its comments to the Contractor within a period of 7 (seven) days of receipt of the QAP stating the modifications, if any, required and the Contractor shall incorporate those in the QAP conforming with the provisions of this clause. The QAP shall include the following:
 - a) Contractor's Organization & structure, duties and responsibilities of individual key personnel, quality policy of contractor, procedure for control of non-conformities and corrective action, inspections and documentation.
 - b) Internal quality audit system.
 - c) Machinery, Shuttering, other Tool & Plants, etc. required to be deployed at site.
 - d) Method statement of important activities. These can be submitted as per the sequencing of the activities of the work.
 - e) Quality control mechanism including sampling and testing of Materials, test frequencies, standards, acceptance criteria, testing facilities, reporting, recording and interpretation of test results, approvals, proforma for testing and calibration in accordance with the Specifications and Standards and Sound Engineering Practice; and Material Lot size, number of required tests and frequency of testing for different construction materials.

All the relevant and applicable codes, specifications and standards, as well as the acceptance criteria for various items of work, workmanship, materials and process employed needs to be mentioned.

- f) Check-list for various items and materials.
- g) Formats for site documentation, monthly reports on implementation of QAP.

(ii) Sampling of materials

All samples of materials including Cement Concrete Cubes shall be taken by the QA engineers deployed by the Contractor and shall be witnessed by the Engineer-in-Charge

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or his authorized representatives as specified in NIT. All the necessary assistance, facilities and safety shall be provided by the contractor. Cost of sample of materials and testing charges shall be borne by the contractor and he/she is responsible for safe custody of samples to be tested at site.

(iii) Testing of Materials

The contractor shall establish temporary field laboratory of adequate size with all necessary facilities. Field laboratory shall be equipped with the testing equipment for conducting routine field tests as per this contract. It will also have copies of standards, BIS codes, IRC codes, relevant publications.

All the tests in field lab setup at construction site shall be carried out by the QA Staff deployed by the contractor and shall be witnessed by the Engineer-in- Charge or his authorized subordinates as specified in NIT. The contractor shall provide all necessary facility to them for witnessing the tests in the field laboratory. In general, contractor shall carry out 90% of field tests in site laboratory and 10% tests shall be got carried out from outside laboratory as indicated below. Contractor shall endeavour to obtain test reports for tests conducted from outside laboratory in a reasonable time.

Or else the contractor shall identify NABL accredited laboratory approved by EIC for carrying out 100% of test at that facility.

(iv) Maintenance of Register of Test -

- All the entries in the register of test are to be made by the designated QA Engineers of the contractor and same is to be regularly reviewed by the field officers as well as the Engineer-in-Charge. The contractor shall allow inspection of such records any time as desired by Engineer-in-Charge or his authorized representative.
- All the tests carried out at construction site or outside laboratories are to be maintained by the contractor in the prescribed format in the test registers provided by the contractor and duly authenticated by Engineer-in- Charge. The test reports shall also be maintained in hard file.
- Contractor is responsible for maintenance and safe custody of all the test registers and test records.
- Mandatory test conducted as per approved proforma shall be attached with each Running bill. Submission of copy of all test registers and material at site register along with each alternate Running Account Bill and with Final Bill is mandatory.

(v) Maintenance of Material at Site (MAS) Register-

MAS register of the key materials including Cement and Steel Registers shall be maintained in the proforma approved by Engineer-in-Charge. All the entries in the MAS registers are made by the designated staff of the contractor and same is regularly reviewed by the field officers as well as the Engineer-in-Charge. Contractor is responsible for maintenance and safe custody of MAS registers.

- (vi) The Contractor shall procure all relevant codes, publications, apparatus and instruments, fuel, consumables, water, electricity, labour, materials, samples and qualified personnel as are necessary for examining and testing the Works, Materials and workmanship in accordance with the Quality Assurance Plan.
- (vii) All the cost of testing including cost of samples, packaging, transportation, testing charges of Construction, Materials and workmanship under this clause shall be borne by the contractor.
- (viii) The contractor shall submit monthly quality progress report on implementation of the

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provisions of Quality Assurance Plan on the format approved by the Engineer-in-Charge.

22.2 Samples

The Contractor shall, at its own expense and without delay, provide the samples of Materials and relevant information like Manufacturer's test reports, standard samples of manufactured Materials and Samples of such other Materials as the Engineer-in- Charge may require for review and approvals in accordance with Clause 10A of GCC before actual use.

22.3 Test

- (i) For determining that the Works conform to the Specifications and Standards, the Engineerin-Charge shall require the Contractor to carry out or cause to be carried out tests, at such time and frequency and in such manner as specified in this Agreementand in accordance with sound engineering practice for quality assurance. Frequency and the manner in which tests shall be conducted shall be in the following order of preference:
 - (a) Contract provisions.
- (b) CPWD specifications.
- (c) BIS codes.
- (d) IRC codes.
- (e) MoRTH Specifications.
- (f) International Codes.
- (g) Manufacturer's specifications.
 - Outside tests shall be conducted at Government labs /IITs/NITs and other approved laboratories by the Engineer-in-Charge for testing of materials
- (ii) The Contractor shall, with due diligence, carry out all the tests in accordance with the Agreement and furnish the results thereof to the Engineer-in-Charge. The Engineer-in-Charge or his authorized representative shall witness or participate during the testing as specified in NIT. The contractor shall provide all necessary assistance for witnessing/participating in the field tests.
- (iii) In the event that results of any tests conducted under this clause establish any defects or deficiencies in the Works, the Contractor shall carry out remedial measures at its own cost and furnish a report to the Engineer-in-Charge in this regard. The Engineer-in-Charge shall require the Contractor to carry out or cause to be carried out tests to determine that such remedial measures have brought the works into compliance with the Specifications and standards and the procedure shall be repeated until such Works conform to the Specifications and Standards.

22.4 Method Statement

The 'Method statement' is a statement by which the construction procedures for important activities are stated, checked, and approved. The method statement shall be prepared for important activities as identified by the contractor as mentioned in QAP or any other activity as instructed by Engineer-in Charge. The 'Method statement', should have a description of the item with elaborate procedure in steps to implement the same, the specifications of the materials involved, equipment to be deployed, measures for ensuring safety, their testing and acceptance criteria, precautions to be

taken, mode of measurement, etc. The Contractor shall, at least 15 (fifteen) days prior to the commencement of activities, submit to the Engineer-in-Charge for review, the method statements proposed to be adopted for executing the various items of work. The Engineer-in-Charge shall complete the review and convey its comments, if any, to the Contractor within a period of 07 (seven) days from the date of receipt of the proposed methodology from the Contractor.

22.5 Inspection & review by the Engineer-in-Charge and External Audit.

The Engineer-in-Charge, his authorized subordinates, senior officers of department, QA unit or any other third party may inspect and review the progress and quality of the work and issue appropriate directions to the Contractor for taking remedial action in the event the work is not in accordance with the provisions of this Agreement. The work may be inspected at any time/stage by external inspection teams like CTE or TE, Third Party Quality assurance agency, CPWD team etc. may conduct inspection of the quality of the works. The findings of the inspections shall be notified to the Contractor for taking remedial action in accordance with the agreement. The Contractor shall provide all assistance as may be required by the inspection teams in the conduct of its inspection here under.

Suitable actions shall be taken as per the provisions contained in the relevant clauses of the agreement, if the work is not found to be as per specifications or quality as specified in the agreement.

22.6 Inspection of records

The Engineer-in-Charge or his authorized representative shall have the right to inspect the records of the Contractor relating to the works.

22.7 Inspection of Works

- (i) The Engineer-in-Charge and his authorized subordinates shall at all times;
- (a) have full access to all parts of the site and to all places from which natural materials are being obtained for use in the works; and
- (b) during production, manufacture and construction at the site and at the place of production, be entitled to examine, inspect, measure and test the materials and workmanship and to check the progress of the manufacturer of Materials.
- (ii) The Contractor shall give the Engineer-in-Charge and its authorized representative access, facilities and safety equipment for carrying out their obligations under this Agreement.

22.8 Examination of work before covering up/ Test Check of item of Work

In respect of the work which the Engineer-in-Charge or his authorized representatives are required to examine, inspect, measure or test before it is covered up or put out of view or any part of the work is placed thereon, the Contractor shall give notice to the Engineer-in-Charge whenever any such work is ready and before it is covered up. The Engineer-in-Charge shall then either carry out the examination, inspection or testing without unreasonable delay within 7 days, or promptly give notice to the Contractor that the Engineer-in-Charge does not require him to do so. Provided, however, that if any work is of a continuous nature where it is not possible or prudent to keep it uncovered or incomplete, the Contractor shall notify the schedule of carrying out such work to give sufficient opportunity, not being less than 3(three) business days' notice,

to the Engineer-in-Charge to conduct its inspection, measurement or test while the work is continuing. Provided further that in the event the Contractor receives no response from the Engineer-in-Charge within a period of 3 (three) business days from the date on which the

Contractor's notice hereunder is delivered to the Engineer-in- Charge, the Contractor shall be entitled to assume that the Engineer-in-Charge would not undertake the said inspections.

22.9 Rejection

- (i) If, as a result of an examination, inspection, measurement or testing, any Plant, Materials, design or workmanship is found to be defective or otherwise not in accordance with the provisions of this Agreement, the Engineer-in-Charge may reject such piece of work, Plant, Materials, design or workmanship by giving notice to the Contractor, with reasons. The Contractor shall then promptly make good the defect and ensure that the rejected item complies with the requirements of this Agreement.
- (ii) If the Engineer-in-Charge requires a Piece of work, Plant, Material, design or workmanship to be retested, the tests shall be repeated on the same terms and conditions, as applicable in each case. If the rejection and retesting cause the department to incur any additional costs, such costs shall be recoverable by the Engineer-in-Charge from the Contractor and may be deducted by the Engineer- in-Charge from any amount due to be paid to the Contractor.
- (iii) The Contractor shall not be entitled to any extension of time on account of rectifying any defect or retesting as specified in this clause.
- (iv) Examination, inspection, measurement or testing of any Plant, Material, design or workmanship by the Engineer-in-Charge or its failure to convey its observations or to examine, inspect, measure or test shall neither relieve the Contractor of its obligations and liabilities under this Agreement in any manner nor shall the Engineer-in-Charge be liable for the same in any manner.

22.10 Remedial work

- (i) Notwithstanding any previous test or certification, the Engineer-in-Charge may instruct the Contractor to:
- (a) remove from the site and replace any piece of work, plant or materials which are not in accordance with the provisions of this Agreement.
- (b) remove and re-execute any work which is not in accordance with the provisions of this Agreement and the Specification and Standards; and
- (c) execute any work which is urgently required for the safety of the Project, whether because of an accident, unforeseeable event or otherwise.

(ii) If the Contractor fails to comply with the instructions issued by the Engineer-in-Charge under aforesaid para, within the time specified in the notice or as mutually agreed, the Engineer-in-Charge may get the work executed by another agency. The cost so incurred by the Engineer-in-Charge for undertaking such work shall, without prejudice to the rights of the Engineer-in-Charge to recover damages in accordance with the provisions of this Agreement, be recoverable from the Contractor and may be deducted by the Engineer-in-Charge from any amount due to be paid to the Contractor.

22.11 Quality Control Records

The Contractor shall hand over authenticated copy of all its quality control records and documents to the Engineer-in-Charge before the Completion Certificate is issued.

22.12 Suspension of unsafe Construction Works

- (i) Upon recommendation of the Engineer-in-Charge to this effect, or on his own volition in cases of emergency or urgency, the Engineer-in-Charge may by notice require the Contractor to suspend forthwith the whole or any part of the Works if, in the reasonable opinion of Engineer-in-Charge, as the case may be, such work threatens the safety of the Users and or other persons on or about the Project. Provided, however, that in case of an emergency, the Engineer-in-Charge may suomoto issue the notice referred to hereinabove.
- (ii) The Contractor shall, pursuant to the notice underabove para, suspend the Works or any part thereof for such time and in such manner as may be specified by the Engineer-in-Charge and thereupon carry out remedial measures to secure the safety of suspended works, the Users, other persons and vehicles on or about the Project. The Contractor by notice require the Engineer-in-Charge to inspect such remedial measures forthwith and request for revocation of suspension. Upon reviewing the remedial measures, the Engineer-in-Charge shall either revoke such suspension or instruct the Contractor to carry out such other and further remedial measures as may be necessary and reasonable and the procedure set forth in this Clause shall be repeated until the suspension hereunder is revoked.
- (iii) Subject to other provisions of the agreement, all reasonable cost incurred for maintaining and protecting the Works or part thereof during the period of suspension (the "Preservation Costs") shall be borne by the contractor, if in the opinion of Engineer-in-Charge suspension is on account of reasons attributable to the contractor.

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

All works to be executed under the contract shall be executed under the direction and subject to the approval in all respects of the Engineer-in-Charge who shall be entitled to direct at what point or points and in what manner they are to be commenced, and from time to time carried on.

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CLAUSE 25 (Settlements 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) 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 party shall promptly within 15 days of the arising of the disputes request the Dean (Admin) 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) shall give the opposing party two weeks for a written response, and, give its decision within a period of 60 days extendable by 30 days by consent of both the parties from the receipt of reference from Dean (Admin). 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.

If the Dispute Redressal Committee (DRC) fails to give its decision within the aforesaid period or any party is dissatisfied with the decision of Dispute Redressal Committee (DRC) or expiry of time limit given above, then either party may within a period of 30 days from the receipt of the decision of Dispute Redressal Committee (DRC), give notice to the Director IPR, for appointment of arbitrator on prescribed proforma as per Appendix XV 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 Director IPR, shall in such case appoint the sole arbitrator within 30 days of receipt of such a request and refer such disputes to arbitration. 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 DRC.

Parties, before or at the time of appointment of Arbitrator 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 if any fees are payable to the arbitrator, these shall be paid as per the Act.

The place of arbitration shall be as mentioned in Schedule F.

CLAUSE 26 (Contractor to indemnify Institute against Patent Rights)

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The contractor shall fully indemnify and keep indemnified the Director, IPR 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 Institute 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, IPR 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 (Lump sum 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 manufacturer'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 (With-holding and lien in respect of sums due from contractor)

(i) 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 Institute 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 Institute 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 Institute 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 Institute 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 Institute will be kept withheld or retained as such by the Engineer-in-Charge or Institute 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 Institute shall be entitled to withhold and also have a lien to retain towards such claimed amount or amounts in

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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.

(ii) Institute 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 over payment and it shall be lawful for Institute to recover the same from him in the manner prescribed in sub-clause (i) 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 Institute to the contractor without any interest thereon whatsoever

Provided that the Institute 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 Dean (Admin) IPR on the one hand and the contractor on the other under any term of the contract permitting payment for work after assessment by the Dean (Admin) IPR

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 Institute or any other contracting person or persons through Engineer-in-Charge against any claim of the Engineer-in-Charge or Institute 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 Institute 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 Institute will be kept withheld or retained as such by the Engineer-in-Charge or the Institute 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 30 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 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 Committee not more than that ceiling price shall be paid to the laour by the contractor.

The contractor shall immediately remove any labourer who may be pointed out by the Engineer-incharge as being a coal mining or controlled area labourer. Failure to do so shall render the contractor liable to pay to Government 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 worked shall be final and binding upon all parties to this contract.

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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 Bankuara, 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 31 (Water for Works)

The contractor(s) shall make his/their own arrangements for water required for the work and nothing extra will be paid for the same. This will be subject to the following conditions.

- i) That the water used by the contractor(s) shall be fit for construction purposes to the satisfaction of the Engineer-in-Charge.
- ii) The Engineer-in-Charge shall make alternative arrangements for supply of water at the risk and cost of contractor(s) if the arrangements made by the contractor(s) for procurement of water are in the opinion of the Engineer-in- Charge, unsatisfactory.

CLAUSE 31 A (Institute water supply, if available)

Water if available may be supplied to the contractor by the Institute subject to the following conditions:

- (i) The water charges @ 1% shall be recovered on gross amount of the work done.
- (ii) The contractor(s) shall make his/their own arrangement of water connection and laying of pipelines from existing main of source of supply.
- (iii) The Institute do not guarantee to maintain uninterrupted supply of water and it will be incumbent on the contractor(s) to make alternative arrangements for water at his/ their own cost in the event of any temporary break down in the Institute water main so that the progress of his/their work is not held up for want of water. No claim of damage or refund of water charges will be entertained on account of such break down.

CLAUSE 33 (Return of Surplus materials) - Not Applicable

CLAUSE 34 (Hire of Plant & Machinery)

(i) 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 35 (Condition relating to use of asphaltic material) - Not Applicable

CLAUSE 36 (Employment of Employees Technical Staff and employees)

Contractors Superintendence, Supervision, Technical Staff and Employees

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

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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, qualifications, experience, age, address and other particulars along with certificates, of the principal technical representative to be in charge of the work and other technical representative(s) and their qualifications and experience shall not be lower than specified 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 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 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 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 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 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 appoint person 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-incharge 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) along with every on account bill/final bill and shall produce evidence if at any time so required by the Engineer-in-Charge 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 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 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 Engineer

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 37 (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 Government shall not entertain any claim whatsoever in this respect except as provided under Clause 38.
- (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 Institute / Government of India 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 Institute / Government of India and it will have the right and be entitled to recover the amount paid in the circumstances as aforesaid from dues of the contractor.

CLAUSE 38 (Conditions for reimbursement of levy / taxes if levied after receipt of tenders)

(i) All tendered rates shall be inclusive any tax, levy or cess applicable on last stipulated date of receipt of tender including extension if any. No adjustment i.e. increase 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.

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- (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 Institute and/or the Engineer-in-Charge and further shall 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, , 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 39 (Termination of Contract on death of contractor)

Without prejudice to any of the rights or remedies under this contract if the contractor dies, Dean (Admin) IPR on behalf of the Director, IPR shall have the option of terminating the contract without levy of compensation to the contractor.

CLAUSE 40 (If Relative working in Institute then the contractor not allowed to tender)

The contractor shall not be permitted to tender for works in the Institute (Division in case of contractors of Horticulture/Nursery categories) responsible for award and execution of contracts) in which his near relative is posted as Accountant or as an officer in any capacity. 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 Institute. Any breach of this condition by the contractor would render him liable to be removed from the approved list of contractors of Institute. If however the contractor is registered in any other department, he shall be debarred from tendering in Institute 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 41 (No Gazetted Engineer to work as Contractor within one years of retirement)

No engineer of gazette rank or other officer employed in engineering or administrative duties in an engineering department of 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 42 (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, consumed and in balance (see Clause 10), 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,

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chairs etc. plus 3% wastage due to cutting into pieces, such theoretical quantity being determined and compared with the actual issues each diameter wise, section wise and category wise separately.

- (c) Theoretical quantity of G.I. & Cl. 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.
- (ii) 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 the Dean Admin, IPR regarding theoretical quantities of materials which should have been actually used, shall be final and binding on the contractor.

(iii) The said action under this clause is without prejudice to the right of the Institute to take action against the contractor under any other conditions of contract for not doing the work according to the prescribed specifications.

CLAUSE 43 (Compensation during warlike 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 Dean (Admin), IPR up to Rs. 5000/- and by the Director concerned for a higher amount. The contractor shall be paid for the damages/destruction suffered and for the 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 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 Dean (Admin)/ IPR.

CLAUSE 44 (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 Dean (Admin), IPR may, in his discretion, cancel the contract. The contractor shall

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also be liable for any pecuniary liability arising on account of any violation by him of the provisions of the said Act.

CLAUSE 45 (Release of Security deposit after labour clearance)

Security Deposit of the work shall not be refunded till the contractor produces a clearance certificate from the Labour Officer. As soon as the work is virtually complete the contractor shall apply for the clearance certificate to the Labour Officer under intimation to the Engineer-in-Charge. The Engineer-in-Charge, on receipt of the said communication, shall write to the Labour Officer to intimate if any complaint is pending against the contractor in respect of the work. If no complaint is pending, on record till after 3 months after completion of the work and/or no communication is received from the Labour Officer to this effect till six months after the date of completion, it will be deemed to have received the clearance certificate and the Security Deposit will be released if otherwise due.

(XII) PROFORMA OF SCHEDULES

Salient Governing Features of the Tender/Work

SCHEDULE 'A' :	Schedule of quantities		
Schedule of (Quantities -	Attached	As per price bid
Location: Institute for Plasma Research, Near Indira Bridge, Bhat, Gandhinagar - 382 428			82 428

SCH	EDULE 'B' :	Schedule of Materials to be issued to the contractor – No materials to be Supplied to the Contractor.		
Sr. No	Description of item	Quantity	tity Rates in figures and words at which the material will be charged to the contractor.	
1	2	3	4	5
1.	Water for construction Purpose		Department supply on request as per conditions of contract – @ 1% of the accepted tendered value.	
2.	Electricity for construction purpose		Department supply on request as per conditions of contract @ Rs .13 per unit.	

SCHEDULE 'C': Tools and Plants to be hired to the contractor			
Sr.No	Description	Hire charges	Place of issue
1	2	3	4
	NIL	NIL	NIL
Note	Labour hutments / labour camp	No labour hutment permit	ted at site within campus

SCHEDULE 'D'	
Extra schedule for specific requirements / documents for the work, if any	Particularly for Security Regulations as per Conditions of contract

SCHEDULE 'E' :	Reference to General Conditions of Contract.		As per Tender document
Name of Work: Construction of Shed Building for Augmentation of Workshop facility (Extension of Workshop Fabrication yard) at IPR campus, Institute for Plasma Research, Bhat, Gandhinagar -382428, Gujarat on Design, Build and Transfer Basis including Designing, obtaining Statutory permissions, Construction (Build) to make facility for use and Transfer to Institute for Plasma Research (IPR).			
Estimated cost of work:			Rs. 3,08,00,000/-
i) Earnest money			Rs. 6,16,000/-
ii) Performance Guarantee			5 % of Tendered Value
iii) Security Deposit			2.5% of Tendered Value

Construction of Shed Building for Augmentation of Workshop facility (Extension of Workshop Fabrication yard) at IPR campus.

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SCHEDULE 'F' :

General Rules & Directions :			
Officer inviting tender :	On the behalf of Director , IPR by		
	Dean (Admin), Institute for Plasma Research, Near Indira		
	Bridge,		
	Bhat, Gandhinagar -382428		
	Contact Person: Mr. Shailendra Trivedi,		
	Officer In-charge, e- Tender, IPR		
	(E-mail id: etender.icdc@ipr.res.in)		
	Telephone No079-2396 2000 - 2396 4009		
	Fax No079 -2396 2277		

Definition	Definitions : Conditions of Contract				
1	Engineer-in-charge	Engineer-in-Charge or his representatives who shall supervise the work			
2	Accepting Authority	Director, Institute for Plasma Research			
3	Percentage on cost of materials and labour to cover all overheads & profits	15% (Fifteen percent)			
<u>4</u>	Standard Schedule of Rates (SOR)	Delhi Schedule of Rates (DSR) -2023			
<u>5</u>	Department / Institute	Institute for Plasma Research			
<u>6</u>	Standard Contract Form	Lump sum Tender as per tender document			

Clause - 1	
i) Time allowed for submission of Performance Guarantee from the date of issue of letter of acceptance	15 days
ii) Maximum allowable extension with late fee @0.1% per day of Performance Guarantee amount beyond the period (provided in – i) above.	7 days

Clause – 1A	Recovery of Security Deposit	2.5% of the accepted tendered value of the work
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Clause – 2	Authority for fixing compensation under clause 2.	Dean (Admin) IPR
	Clause 2.	

Clause - 5	Number of days from the date of issue of WO for	15 days
	reckoning date of start.	-

Mile stone(s) as per table given below:		As per time so Technical bid	chedule for project as mentioned in the	
TABL	E OF MILE STONE(S)			
Sl. No.	Description of Tir Milestone (Physical) date		ne Allowed days (from te of start) ork order	Amount to be with-held in case of non-achievement of milestone

Construction of Shed Building for Augmentation of Workshop facility (Extension of Workshop Fabrication yard) at IPR campus.

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TIME ALLOWED FOR EXECUTION OF WORK 485 Days (including monsoon period, if any)

Authority to decide:

(i) Extension of time : Dean (Admin) , IPR (ii) Rescheduling of mile stones : Dean (Admin), IPR

(iii) Shifting of start in case of delay in handing over site : Dean (Admin), IPR

Clause applicable - (6 or	Clause 6 for Manual Billing or	Clause 6A : Computerized
6A):	Clause 6A for Computerized Billing	Billing is applicable

Clause - 7	Gross work to be done together with net payment / adjustment of advances for material collected, if any, since the last such payment for being eligible to interim payment.	As per the payment schedule as mentioned in Technical bid
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<u>Clause - 10A:</u>	List of testing equipment's to be provided by the contractor / testing			
	laboratory / site as required.			
	1. Balances (i) 7 kg to 10 kg capacity, semi-self-indicating type - accuracy 10 gm. (ii) 500 gm capacity, semi-self-indicating type, accuracy 1 gm. (iii) Chemical balance, 100 gm capacity - accuracy- 0.1 gm. (iv) Pan balance - 5 kg. Capacity - 10 gm accuracy. (v) Platform scale- 300 kg capacity. 2. Sieves as per IS 460-1962. (i) I.S. sieves - 450 mm of internal dia of sizes 100 mm, 80mm, 63mm, 50mm, 40mm, 25mm, 20mm, 12.5mm, 10mm, 6.3mm, 1.75mm, complete with lid and pan. (ii) I.S. sieves - 200 mm internal dia (brass frame) consisting of 2.36mm, 1.18mm, 600 microns, 425 microns, 300 microns, 212 microns, 150 microns, 90 microns and 75 microns with lid and pan.			
Clause - 10B(ii): Mobil	Clause - 10B(ii): Mobilization Advance Not Applicable			

Clau	Clause - 10CA : Not applicable					
Sr. No	Materials Covered under this Clause	Nearest Materials (other than cement* reinforcement bars, the structural steel and POL) for which All India Wholesale Price Index is to be followed	Base price and its corresponding period of all the materials covered under clause 10CA*			
	Not applicable	Not applicable	Not applicable			

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Note: Base price for materials given above are only for regulating operation of clause 10-CA. The tenderers are requested to consider prevailing market rates while quoting the rates.

Clause - 10CC: NOT APPLICABLE					
Clause 10 CC to be applicable in contracts with stipulated period of completion exceeding the period shown in next column. This CLAUSE NOT APPLICABLE					
Schedule of component of other materials, labour etc. for price escalation.					
Component of civil (except materials covered under clause 10CA) / Electrical construction value of work:			%		
Component of Labour		Y	%		

Note: Xm percentage should be equal to (100) – (Materials covered under clause 10CA i.e. cement, still, POL and other materials specified in clause 10CA +component of Labour)

Clause - 11:	
Specifications to be followed for execution of this work	CPWD detailed specification 2019 / or latest released

Clause – 18:	at site (To be decided based of	List of mandatory machinery, tools & plants to be deployed by the contractor at site (<i>To be decided based on nature and magnitude of the work, as and when required, as decided by EIC</i>)	

Note: The list of machinery, tools & plants to be deployed by the contractor at site are minimum. The contractor shall deploy additional machinery, tool & plants in order to maintain the progress of the work without any extra cost to the department.

Clause 25	Constitute of Dispute Redressal Committee (DRC)	To be appointed by Director IPR as and when required.
	Place of Arbitration	Institute For Plasma Research (IPR), Bhat Gandhinagar- 382428 (Gujarat)

Clau	ıse - 36(i):		Requirement of Technical Representative(s) & recovery Rate				
Sl. No ·	Minimum Qualification of Technical Representative	Discipline	Designation (Principal Technical / Technical representative)	Min. Exp. In years	No.	Rate at which recovery shall be made from the contractor in the event of not fulfilling provision of clause 36(i). (In Rs, in every such instance)	
1	Graduate (Degree)/ Diploma Engineer	Civil	Project Manager cum planning/ quality/Site/bi lling Engineer	2-5	1	Rs. 20,000/-	
2	Graduate	Civil	Quality/Site/B	1- 2	1	Rs. 15,000/-	

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	(Degree)/ Diploma Engineer		illing Engineer			
3	Graduate (Degree)/ Diploma Engineer	Electrical	Site Engineer (As when required during execution, as instructed by EIC)	2-3	1	Rs. 15,000/-

Note: Assistant Engineer retired from Government services that are holding Diploma will be treated at par with Graduate Engineers

Clau	Clause - 42:					
(i)	(a) Schedule / statement for determining theoretical quantity of cement & bitumen on the basis of Delhi Schedule Rates	Schedule/statement for determining theoretical quantity of cement & bitumen on the basis given in the tender				
(ii)	Variations permissible on theoretical quantitie	es.				
A	Cement					
	i) For works with estimated cost put to tender not more than <i>Rs.5 Lakhs</i>	3% plus/minus				
	ii) for works with estimated cost put to tender more than <i>Rs.5 Lakhs</i>	2% plus/minus				
b	Bitumen for All works	2.5% plus & only & nil on minus side				
С	Steel reinforcement and structural steel sections for each diameter, section and category.	2.0% plus/minus				
D	All other materials.	Nil				

REC	RECOVERY RATES				
S. No.	Description of Item	Rates in figures & words at which recovery shall be made from the Contractor- Not Applicable			
		Excess beyond permissible variation	Less use Beyond permissible variation		
1	Cement OPC	Nil	Nil		
2	Cement PPC	NIL	NIL		
3	Rebar's	Nil	Nil		

Formats to be scanned and uploaded by the Bidders.

LETTER OF TRANSMITTAL

From:			
	-		
	-		
	_		
То			
Dean (Admin)			
Institute for Plasma Research,			
Bhat,			
Gandhinagar – 382428			

Kind Attention: The Dean (Admin) / Mr. Shailendra Trivedi Officer In-charge (e-tender)

Subject: Construction of Shed Building for Augmentation of Workshop facility (Extension of Workshop Fabrication yard) at IPR campus, Institute for Plasma Research, Bhat, Gandhinagar - 382428, Gujarat on Design, Build and Transfer Basis including Designing, obtaining Statutory permissions, Construction (Build) to make facility for use and Transfer to Institute for Plasma Research (IPR).

Reference: E-Tender Notice No.: IPR/TN/CIVIL-PR/06/2023 Sir / Madam,

Having examined the details given in press Notice and Tender document for the above work, I/We hereby submit the bid document and other relevant information.

- 1. I/We hereby certify that all the statements made and information supplied in the enclosed forms and accompanying statement are true and correct.
- 2. I/We have furnished all information and details necessary for eligibility and have no further pertinent information to supply.
- 3. I/We submit the requisite certified solvency certificate and authorise the Institute to approach the Bank issuing the solvency certificate to confirm the correctness thereof. I/we also authorise Institute to approach individual, employers, firms and corporation to verify our competence and general reputation.
- 4. I/We also authorize IPR officials to approach individuals, employers, firms and corporation to verify our competence and general reputation.

Construction of Shed Building for Augmentation of Workshop facility (Extension of Workshop Fabrication yard) at IPR campus.

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Sr.No	Name of work	Certified by/from	
•			
is certified that	at the information given in the enclose	ed eligibility bid are correct. It is also co	ertif
nat I / We sha	all be liable to be debarred, disquali	fied / cancellation of enlistment in ca	ise a
nformation furn	ished by me / us is found to be incorrec	et.	
Inclosures			
Enclosures.			
Enclosures.		Seal of ap	plica
	sion:	Seal of ap	plica
	sion:	Seal of ap	plica
Enclosures. Date of submis	sion:	Seal of appoint Seal of Application (Signature)	
	sion:		

FORM "A" FINANCIAL INFORMATION

I. Financial Analysis - Details to be furnished duly supported by figures in balance sheet/profit and loss account for the last five years duly certified by the Chartered Accountant.

	Financial Year									
Particulars	2018-19	2019-20	2020-21	2021-22	2022-23					
i) Gross Annual turnover on consultancy work Rs. (In Lakhs)										
ii) Net Profit /Loss (In case of Loss, figure should be entered with negative sign) Rs. (In Lakhs)										

Signature of Chartered Accountant with seal

Signature of Applicant(s)

Form "B"

Details of all Construction works completed during last 7 years ending last day of submission of tender. No works shall be left out.

Details	Work -1	Work -2	Work- 3	•••••
Project name & Location:				
Owner or client: (Name and Address, contact Number of				
Officer to whom reference can be made)				
Project description:				
1. Type of Building:				
2. Type/nature of works details.				
Whether For Government/Semi Government/ Government undertaking/ Government autonomous bodies / Private:				
Actual Project Cost:				
Project duration (as per contract): (in months)				
Start date (dd/mm/yy):				
Actual date of Completion (dd/mm/yy):				
Actual duration (Months):				
Reasons for delay (if any):				
Any penalty/ Bonus:				
Any Litigation/Arbitration/claim/Dispute pending (with details of claimant award if any):				
Copy of Completion certificate & Work order received from client to be attached				

Note:

- 1) For similar completed works, Original or attested scanned copies of initial work order and final completion certificate from client have to be uploaded.
- 2) The final completion certificate shall mention Name of work, Work order value, Completion value, duration, Client name & Address, Location of work, Stipulated start and completion date, Actual Start and Completion date, Reasons for Delay (if any), Nature of Work etc.
- 3) Certified that the above list of work complete and no work has been left-out and the information given is correct to knowledge and belief.

Form "C"

Details of construction works Under Execution (Ongoing works). No works shall be left out.

Details	Work -1	Work -2	Work- 3	•••••
a) Project name & Location :				
b) Owner or client: (Name and Address, contact Number of Officer to whom reference can be made):				
c) Project details in brief:				
d) Stipulated start date :				
e) Actual Start date :				
f) Time period:				
g) Stipulated completion date :				
h) Present Status of work in Percentage completion:				
i) Work Order Value (in lakhs):				
j) Work done value (RA bill) of work (in lakhs):				
k) Type/nature of works details.				
1) slow progress if any and Reasons for Delay, if any:				
m) Copy of Work order received from client to be attached				

- 1) Original or attested scanned copies as well as hardcopies of initial work order from client have to be uploaded.
- 2) The work in progress certificate shall mention Name of work, Work order value, duration, Client name & Address, Location of work, Stipulated start and stipulated completion date, Actual Start date, Reasons for Delay (if any), Nature of Work etc.
- 3) Certified that the above list of work is complete and no work has been left-out and the information given is correct to knowledge and belief.

Form "D"

Performance Report for Completed works mentioned in Eligibility Criteria 1.

Sl	DETAIL	INFORMATION
No		
1	Name of work/Project & Location.	
2	Agreement No	
3	Estimated Cost	
4	Tendered Cost	
5	Date of start	
6	Date of Completion	
	(i)Stipulated date of completion	
	(ii)Actual date of completion	
7	Amount of compensation levied for delayed completion, if any.	
8	Overall performance of the	Excellent / Very Good / Good / Satisfactory/
	consultants	Average / Fair / Unsatisfactory / Poor

Dated: Name & Signature of Client / Executive Engineer or Equivalent with Stamp

FORM "E" ORGANISATIONAL STRUCTURE

Sr. No.	Particulars	Details to be filled
1	Name of Firm	
2	Postal Address	
3	Contact Nos.	
	Office	
	Residence	
	Mobile	
4	Fax No.	
5	Name of Contact Person	
6	E – mail Address	
7	Legal status of Bidder: (Please tick and attach attested copies of original document defining the legal status)	
	(1) An Individual	
	(2) A Proprietary firm	
	(3) A Partnership firm	
	(4) A Pvt. Ltd. Company	
	(5) A Public ltd. Company or Corporation	
8	Particulars of registration with various Government bodies (scanned & uploaded photocopy)	
	Dept./Organisation& Place of registration, Registration No.	
	N 1001 651 650	
9	Names and Titles of Director & Officers with designation proposed to be concerned with this work	
10	Designation of individuals authorised to act on behalf of	
	the organization.	
11	Was the applicant ever required to suspend construction	
	for a period of more than six months continuously after you commenced the construction? If so, give the name of	
	the project and reasons of suspension of work.	
12	Has the applicant or any constituent partner in case of	
	partnership firm, ever abandoned the awarded work	
	before its completion? If so, give name of the project and	
13	reasons for abandonment. Has the applicant, or any constituent partner in case of	
13	partnership firm, ever been debarred / black listed for	
	tendering in any organisation at any time? If so give	
	details.	

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14	Has the applicant or any constituent partner in case of partnership firm, ever been convicted by a court of law? If so, give details.	
15	Any other information considered necessary but not included above.	

Note: Bidder should attach separate sheets if required and if space given in the formats is not sufficient but strictly as per above formats only.

Signature of Applicant(s) with date & seal

Form - "F"

Details of Administrative and Technical Staff Available with the firm and that Proposed to be deployed to complete the work in time.

The bidders should submit list of technical and administrative employees for proper execution of project. The bidder should submit a list of these employees stating how these would be involved in the project.

Sr. No.	Name	Qualification	Designation	Professional experience and details of work carried out	Since when working in your firm	Total Experience (In years)	Capacity in which will be involved for this work (if to be deployed for this work)	Remar ks

Note: Bidder should attach separate sheet if required and if space given in the formats is not sufficient but strictly as per above formats only.

Form - "G "

Details of Construction Equipment available with firm and proposed to be deployed to compete the work in time

Sr. No	Name of Equipment/ Plant	Nos	Capacity or Type & make	Age	Co ndi tio n	Owner Prese-	ship st	To be	Curr ent Loca tion	How many Propos ed for the Proejct	Re m - ark s	
						ntly owned	sed	purch- ased	Prpose d to be hired			
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Excavators(various sizes)											
2	Equipment for hoisting											
	1.Tower crane											
	2. Builders hoist											
	3. Construction Lift											
	4. Front End Loader											
3	Equipment for concrete work											
	1 Concrete batching plant											
	2.Concrete pump											
	3.Concrete transit mixer											
	4.Concrete mixer (diesel)											
	5.Concrete mixer (elect.)											
	6.Needle vibrator (elect.)											
	7.Needle vibrator(petrol)											
	8.Needlevibrator (elect/petrol)											
	9. Curing pumps (various capacities)											
	10. Water tanker/sprinkler											
	11. Concrete Breaker											
4	Equipment for building work											
	Block making machine											
	2. Bar bending machine											
	3. Bar cutting machine											
	4. Wood thickness planers											
	5. Drilling machine											
	6. Circular saw machine											
	7. Welding generators											

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	0 ***1# 0		ı	ı	1		ı	1
	8. Welding transformers							
	9. Welding testing							
	equipments.							
	10. Welding Machines							
	11. Soil Compector							
	12. M.S.pipes							
	13. Steel shuttering							
	14. Steel scaffolding							
	15. Grinding/Polishing machines							
	16. Surveying Equipment							
	17. Generator							
	18. Plate Compactor							
	19.H frames / MS props support							
5	Testing Equipments							
	Cube Testing							
	2. Sieve analysis							
	3. Ultrasonic test							
	4. Silt test							
	5. Micron gauger							
	6. Moisture Metre							
	7. Any other							
6	Equipment for road work							
	1.Road rollers							
	2.Bitumen paver finishers							
	3.Hot mix plant / Wet mix							
	Plant							
	4.Spreaders							
	5.Earth rammers							
	6. Vibratory road rollers							
7	Equipmentfor							
	transportation 1. Tippers							
	2. Trucks							
	3. Water tankers							
	4. Dumper							
8	Pneumatic equipment							
	1. Air compressors (diesel)							
	2. Air Compressors							
	(Elect)							
<u> </u>								
9								
9	Dewatering equipment							
9								
10	Dewatering equipment 1.Pump (diesel)							

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Equipment fo works	r Piling					
1. Hydraulic piling	grig					
2. Piling rigs						
Any	other					
plants/equipmen	ts					

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FORM 'H' Curriculum Vitae of KEY PERSONNEL

Sl	Detail	
NO		
1	Name	
2	Date and place of birth:	
3	Nationality:	
4	Address (phone/fax/e-mail):	
5	Education:	
	(i) Institutions:	
	(ii)From (month/year	
	(iii)To (month/year)	
6	Degree:	
7	Mother Tongue :	
8	Language known:	
9	Membership of professional bodies:	
10	Other skills	
11	Present position:	
12	Years of professional experience	
13	Key qualifications:	
14	Specific experience	
	Date: From - To	
	(i) Brief description	

FORM "I"

FORM OF BANKER'S CERTIFICATE FROM A SCHEDULED BANK

This is to certify that to the	est of our knowledge and info	ormation that M/s
(with address) a customer of	our bank are / is respectable an	d can be treated as good for any engagement up to
a limit of Rs.	(Rupees).
This certificate is issued with	out any guarantee or responsibi	lity on the bank or any of the officers.
		(Signature)
		For the Bank
NOTE:		

- 1. Bankers certificates should be on letter head of the Bank.
- 2. In case of partnership firm, certificate should include names of all partners as recorded with the Bank.

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Form "J" Mandate Form MANDATE FORM FOR ELECTRONIC PAYMENT THROUGH RTGS/NEFT/ECS

To,
Accounts officer,
Institute for Plasma Research
Near Indira Bridge, Bhat
Gandhinagar - 382 428

Dear Sir,

Sub: Authorization for release of Payment due from **Institute for Plasma Research** through Electronic fund transfer RTGS/NEFT/ECS

(Please fill in the information in CAPITAL LETTERS. Please TICK wherever it is applicable)

1. Name of the	Partv		:													
2. Address of the Party :																
2.71441 655 61 6	ile i di ty						•••••	•••••			•					
			City:			.Pin	Cod	le:								
			E-mail Id:.													
			Permanen	it Accou	unt Nur	nber	:									
3. Particulars o	f Bank :															
Bank Name				Branc	h Name	•										
Branch Place				Branc	h City											
Pin Code				Branc	h Code											
MICR NO																
(9 Digits code r	number app	earing or	the MICR Ban	d of the	Chequ	e su	ppli	ed b	y the	Bank. P	leas	e att	ach)	Xerox	сору	of a
cheque of your	bank for er	nsuring a	ccuracy of the b	oank na	me, bra	anch	nar	ne a	ind co	de num	ber)					
Account Type	5	Savings		Curi	rent				Cash	Credit						
Account Number(as appearing in the Cheque Book		()														
RTGS / IFSC Code																
4. Date from v	4. Date from which the mandate should be effective:															
			s given above a													
	•		ect information	•				•								_
in the particula	irs of my acc	count to t	facilitate updat	ion of r	ecords	for p	urp	ose	credit	of amo	ount	thro	ugh	RTGS	/NEF	T/ECS
Place :																
Date :					Signatu			Par	ty / A	uthoriz	ed Si	gnat	ory			
		urnished	above are corre	ect as p	er our l	Reco	rds									
Bank's Stamp :																
Date :						(Sign	atu	re o	f the A	Authoria	zed (Offic	ial fr	om th	e Bar	nk)
2410.						יסיטי	.aca		/			21110	.a. 11	-	C Dui	,
N.B: RTGS Cha	rges, if any	, will be l	orne by the Pa	arty												

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Integrity Pact.				
То,				
Subject : NIT No.	for the work			
Dear Sir,				
•	itute For Plasma Research is committed to etitiveness in public procurement.	follow the principle of		

The subject Notice Inviting Tender 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 document, 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 from part and parcel of the Integrity Agreement and signing of the same shall be deemed as acceptance and signing of Integrity Agreement on the behalf of Institute for Plasma Research.

Yours faithfully,

Dean (Admin), IPR

Integrity Pact

To, Dean (Admin) , IPR
Subject : Submission of Tender for the work of
Dear Sir,
I/We acknowledge that Institute for Plasma Research 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 REARDED AS AN UNCONDITIONAL AND ABSOLUTE 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 main contract, which will come into existence when tender/bid is finally accepted by Institute for Plasma Research. I/We acknowledge and accept the duration of the Integrity Agreement, which shall be in the line with Article 1 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, IPR shall have unqualified, absolute and unfettered right to disqualify the tenderer /bidder and reject the tender/bid in accordance with 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 IPR

INTEGRITY AGREEMENT

This Integrity Agreement is made at on thisday of20
BETWEEN
Director,IPR represented through Dean (Admin) Institute for Plasma Research, Bhat Gandhinagar 382428, (Hereinafter referred as the '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)
through
"Bidder/Consultant" 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
(Name of Work)
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.

Article 1: Commitment of the Principal/Owner

agree as follows and this Pact witnesses as under:

(1) The Principal/Owner commits itself to take all measures necessary to prevent corruption and to observe the following principles:

NOW, THEREFORE, in consideration of mutual covenants contained in this Pact, the parties hereby

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- (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)/Consultant(s)

- (1) It is required that each Bidder (including their respective officers, employees and agents) adhere to the highest ethical standards, and report to the Government / 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) 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) 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 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(swill not commit any offence under the relevant IPC/PC Act. Further the Bidder(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)/ of foreign origin shall disclose the names and addresses of agents/representatives in India, if any. Similarly Bidder(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 participate in a tender on behalf of one manufacturer, he/she shall not be allowed to quote on behalf

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of another manufacturer along with the first manufacturer in a subsequent/parallel tender for the same item.

- (e) The Bidder(s)/ will, when presenting his bid, disclose any and all payments he/she 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)/ will not instigate third persons to commit offences outlined above or be an accessory to such offences.
- (4) The Bidder(s)/ will not, directly or through any other person or firm indulge in fraudulent practice means a willful 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)/ 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)/ and the Bidder/ accepts and undertakes to respect and uphold the Principal/Owner's absolute right:

- (1) If the Bidder(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)/ from the Tender process or terminate/determine the Contract, if already executed or exclude the Bidder/ 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/.
- (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 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/she 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/ can prove that he/she 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)/ undertake(s) to demand from all subcontractors a commitment in conformity with this Integrity Pact. The Bidder/ 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..
- (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/Vendor 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, IPR.

Article 7- Other Provisions

- (1) This Pact is subject to Indian Law, place of performance and jurisdiction is the Head quarters 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 intensions.
- (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

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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 an date first above mentioned in the presence of following witnesses:	d
(For and on behalf of Principal/Owner)	
(For and on behalf of Bidder/)	
WITNESSES:	
1. (Signature, name and address)	
2. (Signature, name and address)	
Place: Dated:	

DECLARATION BY THE BIDDER

I	CERTIFICATE, working as in this
	ganization and authorized to issue this certificate and certify that:
918	
1.	We have gone through the contents of advertisement and related documents for this Tender
	and fulfil all the eligibility criteria as per Tender Document and understood the Terms &
	Conditions of Contract, relevant formats and Evaluation criteria mentioned in the Part-I
	Technical bid.
2.	All relevant documents are enclosed with our Bid.
3.	The details and contents of our Bids are authenticated and based on actual work
	carried out by our agency, as per record.
4.	We have understood that in case it is found that our agency is not fulfilling any of the laid
	down criteria, or relevant details/supporting documents are not found to be enclosed,
	we will not be given any opportunity for any clarifications and our BIDS will be evaluated
	based on the available documents.
5.	We also confirm that the offer now submitted is totally in agreement with the Terms &
	Conditions of Contract read in conjunction with the documents, terms & conditions issued for
	this particular tender.
6.	We hereby declare that we are not black listed by any government department / agencies.
7.	We hereby declare that our firm is not under any liquidation, court receivership or similar proceedings.
8.	We hereby declare that, in the last three years, we have neither failed to perform on any
	contract, as evidenced by imposition of a penalty by an arbitral or judicial authority or a
	judicial pronouncement or arbitration award against the Applicant, nor have been expelled
	from any project or contract nor have had any contract terminated for breach.
9.	I have gone through Terms and conditions which will be followed during execution.

10. I do hereby undertake that our firm shall abide by the Integrity Pact.

Signature of Authorized Signatory	y.
Name:	. Dated:
Designation:	
[Please Affix Rubber Stamp]	

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ANNEXURE-I

Self-Certification under preference to Make in India order Certificate

In line with Government Public Procurement Order No. P-45021/2/2017-PP (BE-II dated 04.06.2020 and its amendments, we hereby certify that we M/s are local supplier meeting the requirement of minimum
local content i.e.,% excluding transportation, insurance, installation commissioning, testing, training and after sales service support like AMC/CMC etc as defined in above orders for the material against IPR Enquiry/Tender E-Tender Notice No.: IPR/TN/CIVIL-PR/06/2023. Details of location at which local value addition will be made as follows:
We also understand, false declarations will be in breach of the code of integrity under rule 175(1) (i) (h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151(iii) of the General Financial Rules along with such other actions as may be permissible under law.
Thanking You,
Signature with date: Name: Designation: Official Seal

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ANNEXURE-II

Annexure to Bid Form: Eligibility Declaration

(To be submitted as part of tender/Technical Bid) (On company letter head) (Along with supporting documents, if any)

(Name and designation)

Duly authorized to sign Bid for and on behalf of

(Name & address of the Bidder and Seal of Company)

Tender No: E-Tender Notice No.: IPR/TN/CIVIL-PR/06/2023.

Tender Tile: Construction of Shed Building for Augmentation of Workshop facility (Extension of Workshop Fabrication yard) at IPR campus, Institute for Plasma Research, Bhat, Gandhinagar -382428, Gujarat on Design, Build and Transfer Basis including Designing, obtaining Statutory permissions Construction (Build) to make facility for use and Transfer to Institute for Plasma Research (IPR). Bidder's Name: (Address and contact details) Bidder's Offer No. Date: Restrictions on procurement from Bidders from a country or countries, or class of countries under Rule 144(xi) of the General Financial Rules 2017. "We have read the clause regarding restrictions on procurement from Bidder of a country which shares a land border with India; and solemnly certify that we are not from such a country or, if from such country, we are registered with the Competent Authority (copy enclosed). We hereby certify that we fulfill all requirements in this regard and are eligible to be considered." Penalties for false or misleading declarations: We hereby confirm that the particulars given above are factually correct and nothing is concealed and also undertake to advise any further changes to the above details. We understood that any wrong or misleading self-declaration by us would be violation of Code of integrity and would attract penalties as mentioned in this tender document, including debarment. (Signature with date)

Construction of Shed Building for Augmentation of Workshop facility (Extension of Workshop Fabrication yard) at IPR campus.

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Annexure-III

List of Probable Materials and their respective IS Codes/ Materials conforming to respective Test Certificates.

Latest revision of relevant standards/Codes/Norms/Acts/Rules/Regulations etc shall be referred.

All the items shall conform to the relevant IS codes, whether the code is specifically mentioned / listed in the tender OR not. Where relevant IS code is not available, relevant Standard manufacturer's specification shall be followed. For Electrical works if relevant IS code is not available, relevant Indian Electricity code shall be followed.

1. Civil and Plumbing works:

Sr. No.	Description of Items	Conforming to IS code (Relevant Code) / Test Certificates
	Structural Steel /Rolled Steel sections-beams, ISMB/ISLB/ NPB beams/Plates/ channels, tee,	IS- 2062, IS 4923, IS 1161, IS 12778 etc and respective Design codes as applicable.
		Test Certificates should be submitted after Procuring of material at site.
1	flats, angles, bars(round, square, hexagonal) Structural Hollow steel sections (Square & Rectangular) Structural tubular sections,	Note: Fabrication shall be in a perfectly workmanship like manner and as provided in IS 800 and IS 7215. Welding shall be carried out by qualified welders. Electrodes for welding, the procedure, selection, test and inspection shall conform to provisions in IS 816, IS 818, IS 822, and IS 833.
		IS- 2062, IS 4923, IS 1161, IS 12778 etc or Respective Design codes as applicable/ As per Manufacturer according to Design,
		Test Certificates should be submitted after Procuring of material at site.
2	Customised Pre-Engineered Sections.	Test Certificates should be submitted after
3	Motorised Pre colour coated GI / Galvalume Rolling Shutter	As per Manufacturer's Specifications.

Construction of Shed Building for Augmentation of Workshop facility (Extension of Workshop Fabrication yard) at IPR campus.

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4	Pre-coated steel roofing/ walling sheets 550 MPa	As per Manufacturer's Specifications. Test Certificates should be submitted after Procuring of material at site.	
5	Cements (OPC/PPC)	IS 269, IS 12269, IS 8112, and IS 1489 etc	
6	White Cement	IS 8042	
7	TMT – Fe-415 / Fe-500/Fe-500D, Fe 550 D Ribbed bars	The steel used for reinforcement shall be of any of the following types: (a) Mild steel and medium tensile bars conforming to IS:432 (Part 1) (b) High strength deformed steel bars conforming to IS:1786 (c) Hard drawn steel wire fabric conforming to IS:1566 (d) Structural steel conforming to Grade A of IS:2062 (e) Thermo-mechanically treated bars (TMT Bars). Test Certificates should be submitted after Procuring of material at site.	
8	Coarse Aggregates (machine cut) 6mm to 40mm sizes	IS 383	
9	Stone Rubbles & Gravels	IS 383	
10	Shuttering plywood	IS 303,	
11	Decorative ply (Veneer)	IS 1328	
12	MDF	IS 12406	
13	Prelam particle board	IS 1328	
14	Laminate sheet	IS 12406	
15	Cement bonded particle board	IS 14276	
16	Calcium silicate board	IS 8154	
17	Flush door – decorative / non decorative	IS 2202	
18	Compact sheet	IS 2046	
19	Locks	As per Manufacturer according to Design,	
20	Float Glass / Mirror	As per IS 14900, /Test Certificates	
21	Precast terrazzo tiles & skirting(Mosaic)	As per Manufacturer's Specifications.	
22	Vitrified tiles	IS 15622/Test Certificates Test Certificates should be submitted after Procuring of material at site.	
23	Construction chemicals	As per Manufacturer's Specifications.	
24	Joint Filler / silicon paint	As per Manufacturer's Specifications. Test Certificates should be submitted after Procuring of material at site.	
25	Paint	IS 15489/Test Certificates	
	Construction of Shad Building for Augmentation of Workshop facility (Extension of Workshop Entrication		

Construction of Shed Building for Augmentation of Workshop facility (Extension of Workshop Fabrication yard) at IPR campus.

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26	Polish	As per Manufacturer's Specifications. Test Certificates should be submitted after
	Tonon	Procuring of material at site.
27	Door Window & Furniture Hardware	As per Manufacturer's Specifications. Test Certificates should be submitted after Procuring of material at site.
28	Adhesives	As per Manufacturer's Specifications. Test Certificates should be submitted after Procuring of material at site.
29	Floor spring	IS 6315 /Test Certificates
30	Door closer	IS 3564 Test Certificates should be submitted after Procuring of material at site.
31	Aluminium sections	As per Manufacturer's Specifications. Test Certificates should be submitted after Procuring of material at site.
32	Paver Blocks	As per Manufacturer's Specifications. Test Certificates should be submitted after Procuring of material at site.
33	Rivets	IS:1148
34	Electrodes for welding	IS:814
35	Bolts and nuts	IS:1367
36	Mild steel wire gauze jali	IS:280
37	Washers	IS:2016
38	Primer to structural surface for bolts	IS:2074
39	Chequered plates	IS:3502
40	Distemper and dry colour	IS:427
41	Distemper and oil emulsion	IS:428
42	Enamel paints	IS:2933
43	Coat of zinc chromate	IS:104
44	French spirit polish	IS:348
45	GI sheets	IS:227
46	Ac sheets	IS:459
47	Ac sheet fixing	IS:730
48	Mangalore pattern tiles	IS:654
49	Fiber glass reinforced polyester	IS:4154
50	Galvanized steel for barbed wire	IS:278
51	Heavy C.I. pipes	IS:1729
52	GI pipes & MS tubes	IS:1239 (PART I)
53	Screw down bib cocks & stop cocks	IS:781
54	Vitreous sanitary fixtures(general)	IS:2556 (PART I)
55	Gun metal wheel, globe, check, gate & non return valves	IS:778

Construction of Shed Building for Augmentation of Workshop facility (Extension of Workshop Fabrication yard) at IPR campus. Page **139** of **165**

56	Wash basin	IS:2556 (PART IV), IS:771
57	European W.C.	IS:2556, IS:771
58	Solid plastic seat & cover	IS:2548
59	Orissa pan W.C.	IS:2556 (PART III)
60	Squatting pans & traps	IS:2556 (PART III)
61	Indian W.C. (wash down W.C.)	IS:2556 (PART II), IS:771
62	Urinals	IS:2556 (PART VI)
63	Half round channels	IS:2556 (PART VII)
64	Specific requirements of siphonic wash down W.C.	IS:2556 (PART VIII)
65	Ss sink/C.I./flushing tank brackets	IS:775
66	C.I. siphonic flushing cistern	IS:774
67	Lead pipes	IS:404 (PART I)
68	Sand cast pipes & fittings	IS:1729
69	C.I. spun soil pipes & fittings	IS:3939
70	Gully trap	IS:651
71	Glazed stone ware pipes & fittings	IS:651
72	Ac pipe	IS:1626,IS:1626 (PART I)
73	High pressure/crydon ball valve	IS:1703
74	C.I. sluice valve	IS:780
75	Capstan head	IS:1795
76	Malleable iron fittings	IS:1879 (PART I TO X)
77	C.I. pipes	IS:1536, IS:1537
78	Molten (pig)lead	IS:782
79	C.I. manhole frames & covers	IS:1726
80	Concrete pipes	IS:458
81	Threads for screwed pipes	IS:554
82	Lead jointing	IS:718
83	Carbon steel for pipes	IS:9161
84	Low level ceramic cistern	IS:774
85	Bowl pattern flat back urinals	IS:2556 (PART IV)
86	Showers	IS:2064

Other Applicable IS codes for CIVIL and PH works:

1.	Plain and Reinforced Concrete - Code of Practice	IS 456
2.	Code of practice for use of electric arc welding for general construction in steel	IS:813
3.	Tests for welding works	IS:1181
4.	Welding works	IS:816
5.	Tests for bolts and nuts	IS:1608
6.	Structural steel sections & tests	IS:226
7.	Welding procedure & edge preparation	IS:823
8.	Storage of welding wire & electrodes	IS:816
9.	Code of practice for painting of ferrous metal in building and allied finishes	IS:1477 (PART I & II)
10.	Code of practice for painting concrete, masonry and plaster surfaces	IS:2395
11.	Expanded metal steel sheet	IS:412
12.	Code of practice for construction of floor and roof with joists and filler blocks	IS:6061 (PART I)
13.	Code of practice for construction of light weight concrete block masonry	IS:6042
14.	Specification for load bearing light weight concrete blocks	IS:3590
15.	Code of practice for construction of hollow concrete block masonry	IS:2572
16.	Specification for concrete masonry units (hollow and solid concrete blocks)	IS:2185 (PART I)
17.	Chemical composition of ordinary Portland cement	IS:4032
18.	Specifications for circular hollow sections	IS:1161
19.	Properties of rectangular & square hollow sections	IS:4923
20.	Cold formed welded & seamless carbon steel structural tubing	Respective Standard Code, / As per Manufacturer's Specifications.
21.	Cold but not formed welded & seamless carbon steel structural tubing	Respective Standard Code, / As per Manufacturer's Specifications.
22.	Hot formed welded & seamless high strength low alloy tubing	Respective Standard Code, / As per Manufacturer's Specifications.
23.	Hot rolled structural steel hollow section	Respective Standard Code, / As per Manufacturer's Specifications.
24.	Specification for Zinc Oxide for Paints	IS 35
25.	Road Tar Specification	IS: 215
26.	Specification for Black Japan Type A, B & C	IS:341
27.	Code of Practice for General Construction in Steel	IS:800
28.	Code of Practice for Cold Formed Light Gauge Steel Structural Member in General Building Construction	IS:801
29.	Specification for Cold Formed Light Gauge Structural Steel Sections	IS:811

Construction of Shed Building for Augmentation of Workshop facility (Extension of Workshop Fabrication yard) at IPR campus.

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31. Code of Practice for Design Loads 22. Equivalem Matric Units for Scales Dimension and Quantifies in General Construction Work 33. Code of Basic Requirements for Water Supply Drainage and Sanitation Recommended Practice for Radiographic Examination of Fusion Welded Butt Joint in Steel Plates 34. Examination of Fusion Welded Butt Joint in Steel Plates 35. Sand for Plaster Specifications 36. These and Chimneys for Domestic heating Appliances 37. Block boards Specifications 38. Code of Practice for Application of Cement and Cement Lime Plaster Finishes 39. Specification for Self Closing Taps for Water Supply Purposes 40. Specification for Self Closing Taps for Water Supply Purposes 40. Steel Plates, Sheets, Strips and Flats For Structural And General Engineering Purposes – Dimension 41. Seel Dats, Round and Square For Structural And General Engineering Purposes – Dimension 42. Code of Practice for Sulding Drainage 43. Method of Load Test on Soils 44. Code of Practice for Subsurface Investigation for Foundation 45. Criteria For Earthquake Resistance Design of Structures 46. Specification for Aluminium Windows for Industrial building 47. Specification for Shand For Masonry Mortars 48. Method For Standard Penetration Test For Soils 49. Specification for Sand For Masonry Mortars 40. Code of Practice for Inhuminium Windows for Industrial building 41. Specification for Sand For Masonry Mortars 42. Specification for Planting Foundation 43. Specification for Sand For Masonry Mortars 44. Specification for Sand For Masonry Mortars 45. Specification for Sand For Masonry Mortars 46. Specification for Sand For Masonry Mortars 47. Specification for Sand For Masonry Mortars 48. Method For Standard Penetration Test For Soils 49. Specification for Sand For Masonry Mortars 50. Brick Works – Code of Practice 51. Separation of Sand Sandard Penetration Test For Soils 52. Specification of Sand Son (slab and tiles) 53. Specification of Sand Son (slab and tiles) 54. Code of Practice for Inhuminium Wi	30.	Specification for Synthetic Resin Adhesives for Plywood	IS:848
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59. Code of Practice for laying of epoxy resin floor toppings 60. Specification for concrete batching and mixing plant 61. Ready Mixed Concrete – Code of Practice IS: 4925 IS: 4926			IS :3812
toppings 60. Specification for concrete batching and mixing plant 61. Ready Mixed Concrete – Code of Practice IS: 4925 IS: 4926	58.	Stacking and storage of construction material at site	IS :4082
60. Specification for concrete batching and mixing plant IS: 4925 61. Ready Mixed Concrete – Code of Practice IS: 4926	59.	* * *	IS :4631
61. Ready Mixed Concrete – Code of Practice IS: 4926	60.	Specification for concrete batching and mixing	IS: 4925
62. Safety Code for Erection of Structural Steelwork IS: 7205	61.	•	IS: 4926
	62.	Safety Code for Erection of Structural Steelwork	IS: 7205

Construction of Shed Building for Augmentation of Workshop facility (Extension of Workshop Fabrication yard) at IPR campus.

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	Safety Code For Handling And Storage Of Building	IS: 7969
63.	Materials	15.7707
64.	Method of test for determining setting time of	IS: 8142
0 1.	concrete by penetration resistance	
65.	Concrete Admixtures – Specifications	IS :9103
66.	Specification for epoxy resin, hardness and epoxy resin compositions for floor toppings	IS: 9197
67.	Methods of test for preformed fillers for expansion joints	IS :10566
68.	Code of practice for composite construction in structural steel and concrete.	IS :11384
69.	Specification for one Part Grade Polysulphide based joint sealant	IS :11433
70.	Specification for two Part Grade Polysulphide based joint sealant	IS :12118
71.	Code of Practice for Use and Laying of Ductile Iron Pipes	IS :12288
72.	Specification for Sulphate Resistance Portland Cement	IS :12330
73.	UPVC pipes for soil and waste discharge system	IS: 13592
74.	Specification for Polished building stones	IS :14223
75.	Specification of adhesives for use with ceramic tiles and mosaics	IS: 15477
76.	General requirements for vibrators for mass concreting immersion type	IS: 12468
77.	Method of testing bitumen	IS: 1201-1206
78.	Method of testing bitumen	IS: 1206-1212
79.	Concrete mix design	IS:10262

Electrical works:

_			
	1.	Methods of High Voltage Testing.	IS-2071 (P1 to P3)
	2.	Classification of degrees of protection provided by	IS-12063
		enclosures of electrical equipment.	
	3.	Code of Practice for Earthing	IS-3043
	4.	Guide for marking of insulated conductors.	IS-5578
	5.	Guide for uniform system of marking & identification of	IS-11353
		conductors & apparatus terminals.	
	6.	High Voltage Test Techniques	IEC-60 (Part 1 to P4)
	7.	Electro-technical Vocabulary	IS: 1885
	8.	Code of Practice for Fire Safety of Buildings (General) :	IS: 1646
		Electrical Installations.	

CUBICLES AND PANELS & OTHER RELATED EQUIPMENTS

9.	Electrical relays for power system protection	IS-722 IS-1248 IS-3231 (P-3)
10.	Distributed pillars for Voltages not exceeding 1000	IS:5039
	Volts.	
11.	Specification for Switchgear & Control Assemblies.	IS: 8623: (Part I to 3)
	WIRES AND CABLES	
12.	PVC insulated cables for working voltages up to and	IS-694
	including 1100 Volts.	
13.	Code of practice for installation and maintenance of	IS-1255

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	power cables up to and including 33 kV rating	
14.	PVC insulated (heavy duty) electric cables (part 1) for	IS-1554 (P1 and P2)
14.	working voltage up to and including 1100 V Part (2)	13-1334 (F1 alid F2)
	for working voltage from 3.3 kV up to and including	
	22 kV.	
15.	Aluminium conductor for insulated cables	IS:1753
16.	Copper Conductor in insulated cables.	IS:2982
17.	Recommended current ratings for cables.	IS-3961 (P1 to P5)
18.	Mild steel wires formed wires and tapes for armouring	IS-3975
10.	of cables.	15 3773
19.	PVC insulating and sheath of electric cables.	IS-5831
20.	Elastomeric insulating and sheath of electric cables.	IS-6380
21.	Cross linked polyethylene insulated PVC sheathed	IS-7098
21.	cables for working voltage up to and including 1100	
	volts.	
22.	Cross-linked polyethylene insulated PVC sheathed	IS-7098
	cables for working voltage from 3.3kV up to and	
	including 33 kV.	
23.	Conductors for insulated electrical cables and flexible	IS-8130
	cords.	
24.	Specification for drums for electric cables.	IS-10418
25.	Code of Practice for Fire Safety in Cable Runs	IS-12459
26.	GALVANIZING	
27.	Zinc Ingot	IS-209 -
28.	Recommended Practice for Hot-Dip galvanizing on	IS-2629 -
	iron and steel.	
29.	Methods for testing uniformity of coating of zinc	IS-2633 -
	coated articles.	
30.	Hot Rolled medium and high Tensile Strength Steel.	IS-2062
31.	General Construction in Steel – Code of Practice.	IS-800
	PAINTING	
32.	Code of practice for phosphating of iron and steel.	IS-6005
33.	Colours for Ready Mixed Paints and Enamels.	IS - 5
	FIRE EXTINGUISHERS	VG 720.6
34.	Code of practice for fire extinguishing installations and	IS:5306 -
	equipment on premises	
	LIGHTING BIVINIPEG AND A CORCODING	
25	LIGHTING FIXTURES AND ACCESSORIES	IC.1012
35.	General and safety requirements for electric lighting	IS:1913
26	fittings. Water proof electric lighting fittings	IS:3528
36.	Water proof electric lighting fittings.	IS:3528 IS:4012
37.	Dust proof electric lighting fittings.	
38.	Dust tight proof electric lighting fittings.	IS:4013
39.	Industrial lighting fittings with metal reflectors. Industrial lighting fittings with plastic reflectors.	IS:10322 IS:10322
40.		IS:10322 IS:2206
41.	(non flame proof type).	IS:2206 IS:10322
42.	Specification for flood light.	15.10522

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43.	Specification for decorative lighting outfits.	IS:10322
44.	Luminaries for street lighting	IS:10322
45.	Tubular lamps	IS:2418
46.	High pressure mercury vapor lamps.	IS:9900
47.	Capacitors for use in lighting fittings.	IS:1569
48.	Starters for lamps.	IS:2215
49.	Holders for starters for tubular lamps	IS:3324
50.	GLS lamps	IS:418
51.	Water tight electric fittings	IS:3553
52.	Tubular steel poles	IS:2713
53.	Ballasts for tubular fluorescent lamps – performance	IS 1534 (Part 1)
	requirements- Part 1 For switch start circuits	
54.	Particular requirements for ballasts for fluorescent	IS 15885
	lamps	
55.	(Part 1 and Part 2) AC supplied electronic ballast	IS 13021
	for tubular fluorescent lamps – performance	
	requirement	
56.	Electromagnetic compatibility Part 3 Limits for	IS 14700 (Part 3/Sec2)
	harmonic current emissions	
57.	Limits and methods of measurement of radio	IS 6873 (Part5)
	disturbance characteristics	
58.		Electrical lighting and similar
		equipment
59.	Electric Ceiling Type Fans and Regulators	IS-374
60.	Electronic Type Fan Regulators.	IS-11037
61.	General Lighting - LEDs and LED modules - Terms	IS- 16101:2012
	and Definitions	IG 16102/D + 1) 2012
62.	Self- Ballasted LED Lamps for General Lighting	IS- 16102(Part 1): 2012
63.	Services Part 1 Safety Requirements Self-Ballasted LED Lamps for General Lighting	IS 16102(Dort 2) : 2012
05.	Services Part 2 Performance Requirements	15- 10102(Part 2): 2012
64.	Led Modules for General Lighting Part 1Safety	IS- 16103(Part 1): 2012
04.	Requirements	13- 10103(Fait 1) . 2012
65.	Led Modules for General Lighting Part 2 Performance	IS- 16103(Part 2): 2012
05.	Requirements	15- 10103(1 art 2) . 2012
66.	Safety of Lamp Control Gear Part 2 Particular	IS- 15885(Part2/Sec13): 2012
00.	Requirements Section 13 d.c. or a.c. Supplied	15 15005(1 tilt2/50015). 2012
	Electronic Controlgear for Led Modules	
67.	Luminaires Performance Part 1 General Requirements	IS- 16107(Part 1):2012
68.	Luminaires Performance Part 2 Particular	IS- 16107-1:2012
Requirements Section 1 LED Luminaire		
	1	
	CONDUITS ACCESSORIES AND JUNCTION	
	BOXES	
69.	Rigid non-metallic conduits for electrical wiring.	IS: 9537 (Part – 1 & 3)
70.	Rigid steel conduits for electrical wiring	IS:9537 (Part-2)
71.	Flexible steel conduits for electrical wiring	IS:3480
72.	Fittings for Rigid non-metallic conduits.	IS: 3419
73.	Fittings for rigid steel conduits for electrical wiring	IS:2667
	1	1

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74.	Accessories for rigid steel conduits for electrical IS:3837 wiring	
75.	Adaptors for flexible steel conduits.	IS:4649
76.	Steel and Cast Iron Boxes	IS:5133
, 0.	See and cust non Boxes	18.8 18.8
	LIGHTING PANELS	
77.	LV Switchgear and Control gear (Part 1 to 5)	IS:13947
78.	Circuit breakers for over current protection for house	IS:8828
70.	hold and similar installations.	15.0020
79.	Ready mix paints	IS:5
80.	Danger notice plates	IS:2551
81.	Current transformers	IS:2705
82.	HRC Cartridge fuse links for voltage above 650V(Part-	IS:9224
	2)	
83.	Wrought aluminium and Al. alloys bars rods tubes and	IS:5082
	sections for electrical purposes.	
84.	Factory built Assemblies of Switchgear and Control	IS:8623
	Gear for voltages up to and including 1000V AC and	
	1200V DC.	
85.	Direct Acting electrical indicating instruments	IS:1248
86.	Copper	IS:191:2007
87.	Copper Rods and Bars for Electrical Purposes.	IS:613:2007
88.	Method of Chemical Analysis for Copper	IS:440:1964
	ELECTRICAL INSTALLATION	
89.	3 pin plug	IS:1293
90.	Two to three ceiling roses	IS:371
91.	Switches for domestic and similar purposes	IS:3854
92.	Guide for safety procedures and practices in electrical	IS:5216
	work.	
93.	Code of practice for electrical wiring installation	IS:732
	(system voltage not exceeding 650 Volts.)	
94.	Code of practice for earthing.	IS:3043
95.	Code of practice of interior illumination part II & III.	IS:3646
96.	Code of practice for lighting of public through fares.	IS:1944
97.	Guide for selection of electrical equipment for	IS:5571
00	hazardous Areas.	VG 000
98.	Code of practice for use of structural steel in general	IS:800
00	building construction.	10.2622
99.	Methods of Testing uniformity of coating on zinc	IS:2633
100	coated articles.	10,0005
100.	Copper	IS:6005 IS:191: 2007
101.	Copper Pods and Bars for Floatrical Purposes	IS:191: 2007 IS:613: 2007
102. 103.	Copper Rods and Bars for Electrical Purposes. Method of Chemical Analysis for Copper	IS 440: 1964
103.	Method of Chemical Alialysis for Copper	15 440. 1704
	LT SWITCHGEAR	
104.	Specification for low voltage switchgear and control	IS:8623 (Part-I)
104.	gear assemblies	15.0025 (Fatt-1)
105.	Specification for low voltage switchgear and control	IS:13947 (Part-I)
103.	specification for low voltage switchgear and collifor	10.13/7/ (1 411-1)

Construction of Shed Building for Augmentation of Workshop facility (Extension of Workshop Fabrication yard) at IPR campus.

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	gear	
106.		Part 1 General Rules.
107.	Specification for low voltage switchgear and control	IS:13947 (part-2)
	gear	
	Part 2 circuit breakers.	
108.	Specification for low voltage switchgear and control	IS:13947 (part-3)
	gear. Part 3 Switches	
109.	Switch - disconnectors and fuse combination units	Disconnectors
110.	Specification for low voltage switchgear & control	IS:13947 (part-4)
	gear.	
111.	Specification for low voltage switchgear & control	IS:13947 (part-5)
	gear.	•
112.	Specification for low voltage switchgear & control	IS:13947 (part-6)
	gear.	
113.	Multiple function switching devices.	
114.	Specification for low voltage switchgear & control	IS:13947 (part-7)
	gear.	
115.	Ancillary equipments	Part 7
116.	Degree of protection provided by enclosures	IS:12063
117.	Current Transformers	IS:2705
118.	Voltage Transformers	IS:3156
119.	Electrical relays for power system protection	IS:3231
120.	Electrical indicating instruments	IS:1248
121.	AC Electricity meters	IS:722
122. Guide for Marking of insulated conductors of		IS:5578
	apparatus terminals	
123.	Low voltage fuses for voltage not exceeding 1000V	IS:13703 (part 1)
	AC or 1500V DC Part 1	
	General Requirements	
124.	Low voltage fuses for voltage not exceeding 1000V	IS:13703 (part 2)
	AC or 1500V DC	
125.	Fuses for use of authorized persons	
126.	Code of practice of phosphating iron and steel	IS:6005
127.	Wrought Aluminium and Aluminium alloys for	IS:5082
	electrical purposes	
128.	Hot dip galvanising	IS:2633
129.	Specification for Copper.	IS: 191
130.	Copper Rods and Bars for Electrical Purposes	IS 613: 2000
131.	Method of chemical Analysis of Copper	IS: 440: 1964
132.		
	MISCELLENOUS ITEMS	
133.	For Cable jointing & Termination kits	IS: 13573
134.	Specification for Copper	IS: 191: 1980
135.	Solid Drawn Copper Tubes for General Engineering	IS: 2501:1995
	Purposes	
136.	Code of Practice for Electrical Wiring Installations	IS: 732

HVAC works:

1.	Glossary of terms used in Refrigeration and Airconditioning.	IS: 3615 – 1967
2.	Safety code for Air conditioning.	IS : 659 - 1964
3.	Data for outside Summer design conditions for air-conditioning.	IS : 7896 - 1975
4.	Specification for packaged air conditioning units.	IS : 8148 - 1976
5.	■ Safety code for Mechanical Refrigeration.	IS: 660 - 1963
6.	 Inspection and testing of installation. 	IS : 732 III - 1982
7.	 Colour code for identification of pipelines. 	IS : 2379 - 1963
8.	Industrial Cooling Fans	IS : 6272 - 1987
9.	■ Test code for Centrifugal fan.	IS: 4894 -1987
10.	 Code of practice for Industrial Ventilation. 	IS: 3103 -1975
11.	Gun metal gate, globe and check valves for general purpose.	IS :778 , 780 - 1980, 210, 318, 5312
12.	 Inspection of Steel Castings. 	IS: 8092: 1992
13.	 Safety relief Valves 	IS: 12992: 1993
14.	 Butterfly valve for general purpose 	IS: 13095: 1991
15.	 CF Monobloc pumps 	IS: 9542: 1980
16.	 Pumps for process water 	IS: 5659: 1970
17.	■ Installation , operation and maintenance of pumps	IS: 10596: 1983
18.	Code of practice and measurement procedure for testing Refrigerant Compressors.	IS: 5111 – 1969
19.	 Horizontal Centrifugal pumps for clear, cold and fresh water. 	IS: 1520
20.	MS / GI tube, pipes, tubular and other wrought steel fittings. Hot-dip zinc coatings on steel tubes.	IS: 1239 I & II - 1982
21.	 Wrought copper tubes for Ref. & AC purposes. 	IS: 10773: 1995
22.	Code of procedure for manual metal arc welding of MS.	IS : 4736 - 1968
23.	Electrically welded steel pipe for water, gas and sewage. Above: 200 NB, ANSI B 16.9 for pipe fittings.	IS: 3589
24.	 Welds testing by DP 	IS: 3656
25.	Flanges configuration. (ANSI B 16.5 for SS flanges).	IS: 1536 – 1976
26.	 Steel pipe flanges. 	IS : 6392 - 1971
27.	Standard for CI material.	IS: 210

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28.	CI fittings for Pressure piping	IS: 1538
29.	Structural Steel.	IS: 226
30.	■ Gaskets	IS: 638
31.	 Rubber gasket, Teflon gasket for SS piping. 	IS: 628
32.	Dimensions for pipe threads for pressure tight joints	IS: 554 – 1975
33.	Code of practice for fire precautions in welding and cutting operations.	IS: 3016 - 1982
34.	Metal air Ductwork.	IS: 655 – 1963
35.	 Galvanised steel wire sheets. 	IS: 277 - 1977
36.	Glossary of Items symbols and units relating to thermal materials.	IS: 3069
37.	Industrial Bitumin.	IS: 702
38.	Expanded polystyrene for thermal insulation purpose.	IS: 4671 – 1984
39.	Code for practice for application and finishing of thermal insulation material at temp. From -80°C to 40°C. & 40°C to 700°C.	IS : 7240 - 1981 7413 - 1981
40.	 Specifications for Bonded Mineral Wool. 	IS: 8183 - 1976
41.	 Storage and handling of insulation material 	IS: 10556: 1993
42.	 Glass fibre reinforced polyester resin. 	IS: 11246: 1992
43.	 Preformed rigid polyurethane thermal insulation 	IS: 12436: 1988
44.	Rigid Phenolic foams thermal insulation	IS: 13204: 1991
45.	In-situ pouring of Rigid Phenolic foams thermal insulation	IS: 13205: 1991
46.	Bourden tube pressure and vacuum gauges.	IS: 3624
47.	Bolts, nuts, and studs./ threaded fasteners.	IS: 1367
48.	 Code for unfired pressure vessels. 	IS : 2825 - 1969
49.	Cooling tower structure.	IS: 7403
50.	 V belts, and pulleys for Industrial purpose. 	IS: 875, 1893
51.	 Code for shell and tube type heat exchanger. 	IS: 5141
52.	 Specification for three phases Induction motor. 	IS : 325- 1970
53.	 Testing of three phase Induction motor. 	IS: 4029
54.	Code of practice for installation of Induction motor.	IS:900
55.	 Single phase small AC and universal motors. 	IS: 996
56.	 Switches for domestic & similar purpose. 	IS: 4064 1978 –II
	• •	

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57.	Contractors for AC up to 1100 V.	IS: 2959: 1975
58.	■ ACB	IS : 2516- I &II
59.	Accessories for electrical wiring	IS: 3854 – 1969
60.	Code of practice for electrical wiring and fitting for building.	IS: 3837 – 1976
61.	Code for practice for installation and Testing of electrical wiring.	IS: 732 –1963, 1973
62.	 PVC insulated electric cable for working up to and including 1100 volts. 	IS : 694 - 1977
	PVC insulated (HD) electric cable for working up to 1.1 kV and 11kV volts.	IS: 1554: 1981
63.	Direct acting electrical indicating instruments.	IS: 1248
64.	• Starters.	IS: 1822
65.	 Motor starters for voltage not exceeding 1000 Volts. 	IS: 8544 - I to IV 1979
66.	 HRC fuse and links, up to 650 Volts. 	IS: 2208 - 1979
67.	 Degree of protection provided by enclosures for low voltage switch gear and control gears. 	IS: 2147 – 1962
68.	 Code of practice for installation and maintenance of Switchgear. 	IS : 10118: 1982
69.	Earthing.	IS: 3043: 1966
70.	Methods of measurement of noise emitted by machines.	IS: 4758: 1968
71.	 Mechanical vibration – balancing. 	IS: 14280: 1995
72.	Permissible limits of noise level for rotating electrical machines	IS: 12065: 1987

Annexure-IV

List of Preferred makes: Civil & PH Works

Note:

The Contractor shall obtain prior approval from the Engineer-in-charge 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.

Wherever applicable, the Engineer-in-charge may approve any material equivalent to that specified in the tender subject to proof being offered by the Contractor for equivalence to his satisfaction.

S. No.	Material	Preferred make
1	CEMENT	ACC, ULTRATECH, J. P. CEMENT, VIKRAM, SHREE CEMENT, BIRLA SHAKATI, CEMENT CORPORATION OF INDIA, VASAVDUTTA.
2	WHITE CEMENT	J.K., BIRLA
3	READY MIX CONCRETE	SKYWAY, A.C.C., ULTRATECH, LAFARGE, RMC READY MIX , GODREJ, PURE
4	SUPERPLASTICIZERS / ADMIXTURE	MC BAUCHEMIE, SIKA, FOSROC, BASF, ASIAN LABORATORIES, SUNANDA CHEMICALS LTD.
5	REINFORCEMENT STEEL (TMT Fe 500)	SAIL, TATA STEEL, RINL, JINDAL STEEL & POWER LTD., JSW STEEL LTD.
6	STRUCTURAL STEEL	TATA STEEL, SAIL, RINL, JINDAL, APPOLO, VIZAG
7	LOW RELAXATION PRESTRESSING STRANDS	TATA , USHA MARTIN, DP WIRES
8	CONCRETE BLOCKS	CONWOOD, GURJARI, HINDUSTAN, LOK GROUP, SAI BLOCK, VED PMC LTD.
9	AAC BLOCKS	BIRLA AEROCON, SIPOREX, ULTRATECH, ECOLITE
10	ADHESIVE FOR AAC BLOCK / TILES	ULTRATECH, ARDEX ENDURA, FERROUS CRETE
11	FRD FRAME & SHUTTERS	SUKRI, KENWOOD, ANCHOR, KUTTY, BHAWANI FIRE
12	METALLIC / STEEL FIRE DOOR	SHAKTI, PROMAT FIRE, NAVAIR, GODREJ, SIGNUM FIRE, SUKRI, KENWOOD, BHAWANI FIRE
13	FIRE SMOKE SEAL	HILTI, PROMATE FIRE, ATROFLAME, RAVEN
14	FIRE RATED HARDWARE	DORMA, INGERSOLRAND, DORSET, BACKERS FS, GEZE, BHAWANI FIRE

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15	FIRE RATED GLASS	SAINTGOBAIN, PROMATE FIRE, SCHOTT, PILKINTON, BHAWANI FIRE
16	CALCIUM SILICATE BOARD	STARPAN, HILUX, AEROLITE, PROMAT
17	INTUMESCENT STRIPS	PROMAT, PEMKO, INTUMEX, ASTROFLAME
18	FLUSH DOOR SHUTTERS	JAIN WOOD INDUSTRIES, KENWOOD, ANCHOR, KUTTY, GREENPLY, NATIONAL, MAYURPLY, MP WOOD, DUROPLY, CENTURY, REGENCY, ARCHIDPLY.
19	HYDRAULIC DOOR CLOSER, FLOOR SPRING	HARDWYN,DORMA, GODREJ, EVERITE, DORSET, HAFELE, KICH
20	LOCKS & LATCHES	GODREJ, DORSET, HEFELE, YALE, LINK
21	ALUMINUM DOOR/ WINDOW FITTINGS	CLASSIC, DEFINE, BHORUKA, JYOTHI, SIGMA
22	WATER PROOF, COMMERCIAL & FIRE RETARDENT PLYWOOD ABD BLOCK BOARDS	ANCHOR, ARCHIDPLY, KITPLY, GREEN PLY, CENTURY, MAYUR PLY, DUROPLY, REGENCY
23	LAMINATES	FORMICA, MERINO, GREENLAM, CENTURY, ARCHIDLAM, KITPLY, SUNMICA, DECOLAM
24	PRELAMINATED PARTICLE BOARD EXTERIOR GRADE	GVK NOVAPAN, MARINO, KITPLY, TESA, ECOBOARD, ARCHID, CENTURY, GREENLAM
25	HIGH DENSITY (HDF), PRELAMINATED BOARD	PERGO, GREENPLY
26	WOODEN ADHESIVE	PIDILITE, NATIONAL
27	SS BUTT HINGES	PRAYAG, OZONE, DORMA, KICH, HAFELE
28	STAINLESS STEEL SCREWS	KUNDAN, ALLOY LTD., GKW, NETTLEFOLD, ATUL FASTENER.
29	ANCHOR / SS STONE CLADDING CLAMPS / DASH FASTENERS	HILTI, FISCHER, ANCHOR, CANNON. BOSCH
30	SS BOLTS, WASHERS, NUTS	KUNDAN, POOJA, ATUL HILTI
31	S. S. HANDLES	DORMA, KICH, HAFELE, DORSET
32	DOOR STOPPER / INDICATOR BOLT / PUSH PLATE	DORMA, KICH, HAFELE, MAGNUM
33	PVC DOOR FRAMES AND SHUTTERS	RAJSHRI, PLASTIWOOD, SINTEX, ACCURA

34	UPVC DOORS, DOOR FRAMES AND WINDOWS	DUROPLAST, LG INDIA, ALUALPHA, PROFILE INDIA, REHAU, FENASTA
35	SS FRICTION HINGES	HETICH, HAFELE, EBCO, ROTO
36	ANTI TERMITE TREATMENT	IPCA APPROVED MAKE
37	STAINLESS STEELPIPES FOR RAILING	MADE FROM SALEM STEEL, JINDAL OR SAIL SHEET.
38	VITRIFIED TILES	AGL, RAK, KAJARIA, H & R JOHNSON, SOMANY, NITCO, ORIENT BELL, AMBANI TILES.
39	CERAMIC TILES	AGL, RAK, KAJARIA, H & R JOHNSON, SOMANY, NITCO, ORIENT BELL, AMBANI TILES.
40	GLASS MOSAIC TILES	BISAZZA, ITALIA, CORAL, MRIDUL, BIRLA, JK CEMENT, PAVIT, PALLADIO
41	ADHESIVE	SIKA, PIDILITE, CICO, FOSROCK, DUNLOP
42	GROUTS	ARDEX ENDURA, FERROUS CRETE, MYK LATICRETE, BASF, FOSROCK, PIDILITE, SAINT GOBAIN
43	COMPOSITE / ITALIAN MARBLE	NITCO, CLASSIC MARBLE, EURO, ASIAN
44	WOODEN FLOORING	ACTION TESA, ARMSTRONG, DURAFLOOR, PERGO, GREENLAM
45	WOOD PLASTIC COMPOSITE (WPC) FLOORING	EGO, EBACO, HEM INTERIOR (WPC DECK)
46	PVC FLOORING	LG HAUSYS, ARMSTRONG, GERFLOR
47	CARPET TILES & ROLLS	WALSPUN GROUP, ROYA, SMJ, SHAW
48	GYPSUM BOARD / GLASS REINFORCED GYPSUM TILE FOR FALSE CEILING	SAINT GOBAIN GYPROC INDIA, USG BORAL BOARD, ARMSTORNG, DIAMOND
49	FALSE CEILINGS & SECTIONS	AEROLITE, ANUTONE, ARMSTRONG, KNAUF, USG BORAL, HUNTER DOUGALS, SAINT GOBAIN, DIAMOND
50	METAL FALSE CEILING	ARMSTRONG, HUNTER DOUGLAS, INTERARCH.
51	THERMAL INSULATION TREATMENT	PIDILITE, BASF, ROCK INDIA
52	ACOUSTIC INSULATION	U P TWIGA, LLOYD INSULATION, SAINT GOBAIN, KNAUF, ANUTONE
53	ROCK WOOL/ GLASS WOOL	VETROTEX INDUSTRIES PVT. LTD., UP TWIGA, ROCK WOOL INDIA LTD.

54	POLYCORBONATE SHEET	LEXAN, MG POLYPLAST, GE SILICONS, DANAPAL, POLYGAL INDIA
55	ALUMINIUM ALLOY SHEET	KALZIP OR EQUIVALENT
56	ZINCALUME PROFILE SHEET	TATA BLUE SCOPE, PENNAR, CRIL (COLOR ROOF INDIA LTD).
57	PRE MIXED CEMENT SAND MORTAR	PURE, WALPLAST, ULTRATECH
58	READY MADE GYPSUM PLASTER	FERROUS CRETE, ULTRATECH, GYPROC
59	PAINTS & PRIMERS	ICI DULUX, ASIAN PAINTS, BERGER, NEROLAC, GODAVRI
60	OIL BOUND DISTEMPER	TRACTOR OF ASIAN PAINT, MAXILITE OF DULUX, MG PLAST OF NEROLAC, BISOM OF BERGER
61	ACRYLIC EMULSION	PREMIUM EMULSION OF ASIAN, SUPER COVER OF DULUX, BEAUTY GOLD OF NEROLAC, BASM OF BERGER
62	WATER PROOFING CEMENT PAINT	ASIAN PAINT, BERGER, DULUX, SNOWCEM
63	ACRYLIC SMOOTH EXTERIOR PAINT	APEX OF ASIAN PAINT, DULUX, NEROLAC, BERGER
64	PREMIUM ACRYLIC SMOOTH EXTERIOR PAINT	APEX ULTIMA OF ASIAN PAINT, DULUX, NEROLAC, BERGER
65	FIRE RETARDANT PAINT	JOTUN, HILTI, DULEX AKZONOBEL, ASIAN PAINTS
66	EPOXY PAINT	ASIAN, BERGER, SHALIMAR, NEROLAC, ARDEX ENDURA
67	WHITE CEMENT BASED PUTTY	MR. PUTTY, BIRLA, J K , ASIAN, BERGER, ARDEX ENDURA
68	MELAMINE POLISH	ASIAN PAINTS, PIDILITE INDUSTRIES, ICI DULUX, POLYCURE.
69	ACRYLIC TEXTURE PLASTER	ASIAN PAINTS, SPECTRUM PAINTS, HERITAGE, ICI DULUX, NEROLAC
70	U. P.V.C RAIN WATER PIPE AND FITTINGS	SUPREME, ASTRAL, ASHIRWAD, FLOW GUARD, FINOLEX, PRINCE
71	C. I. PIPES AND FITTINGS	NECO, SKF, KAPILANSH, RPMF
72	G.I. PIPES AND FITTINGS	SAIL, ZENITH, TATA, JINDAL, HISSAR
73	CPVC PIPES & FITTINGS	ASTRAL, ASHIRWAD, FLOWGUARD, BIRLA AEROCON, SUPREME, FINOLEX, PRINCE, FLOWGUARD

74	S S PRESS FIT PIPES & FITTINGS	J - PRESS OR EQUIVALENT
75	D I PIPES & FITTINGS	ELECTROSTEEL, JINDAL, TATA DUCTURA, SRIPIPES (LENCO)
76	C. P. WATER SUPPLY FITTINGS	JAQUAR, KOHLER, ROCA, MARC
77	SANITARY WARES	JAQUAR, KOHLER, ROCA, CERA, HINDWARE, PARRYWARE
78	TOILET MODULAR CUBICALS	MERINO BY BESCO , MATRIX CUBICLE SYSTEM, JAGUAR
79	S. S. SINK	NIRALI, JINDAL, FUTURA, CERA, DIAMOND, HINDWARE, JOYNA
80	VALVES	ZOLOTO, LEADER, KIRLOSKAR, ARCO, AUDCO
81	FLOAT GLASS MIRROR	MODIGUARD, SAINT GOBAIN, ASAHI, ATUL
82	NP2/ NP3 CLASS, R.C.C. PIPES	JAIN SPUN PIPE, K. K. SPUN PIPE, THE INDIAN HUME PIPE CO. LTD., PATEL HUME PIPES
83	S. F. R. C. COVERS	K. K. SPUN PIPE, JAIN SPUN PIPE, S. S. INDUSTRIES
84	MANHOLE COVERS	NECO OR EQUIVALENT
85	PAVER BLOCKS / TACTILE TILE	VYARA, SUPER, JOHNSON
86	ALUMINIUM EXTRUSION SECTIONS	JINDAL ALUMINUM LTD., HINDALCO, INDAL BHORUKA ALUMINUM LTD., SAPA PROFILES INDIA LTD., GLOBAL ALUMINIUM PVT. LTD.
a-		AS APPROVED BY EIC.
87	ANODIZING	
88	FLOAT GLASS	SAINT GOBAIN, ASAHI GLASS, EMIRATES GLASS, GUARDIAN GLASS, HNG, PILKINTON GLASS
89	REFLECTIVE SOFT COATED / LOW E GLASS	SAINT GOBAIN, ASAHI GLASS, EMIRATES GLASS, GUARDIAN GLASS, GLAVERBEL
90	GLASS PROCESSER	SAINT GOBAIN, ASAHI GLASS, EMIRATES GLASS, GUARDIAN GLASS (SUNGUARD), SEJAL, GLASSTECH, FUSO, FG, GSC, NSD, SCHOTT.
91	SPIDER PATCH FITTING, FOR CURTAIN GLAZING	DORMA, HAFELE, KICH, OZONE, SEVAX OF SAINT GOBAIN
92	GLASS DOOR HARDWARE	DORMA, KICH, HEFELE, OZONE, GEZE, DORSET,

	I	
93	AUTOMATIC SLIDING DOOR OPERATING SYSTEM	DORMA OR EQUIVALENT
94	ALUMINIUM COMPOSITE PANEL	ALUDECOR, EUROBOND, ALSTRONG, ALUCOBOND, ALPOLIC
95	EPDM GASKETS	AMEE RUBBER INDUSTRIES PVT. LTD. , BOHRA RUBBER, ANAND NVH, ROOP POLYMER, OSAKA.
96	BACKER ROD	SUPREME INDUSTRIES, NORTON, BOW, AASTHA
97	ALL TYPES OF SILICONE	DOW CORNING, BASF, GE, WACKER
98	MASKING TAPE	3M, SUN, WONDER TAPE, ROOP POLYMER
99	WATERPROOFING COMPOUND	PIDILITE, STRUCO EXCEL, CICO, FOSROC, MYK LATICRETE, BASF INDIA LTD.
100	MEMBRANE WATER PROOFING SYSTEM	BASF, FERROUS CRETE, SHALIMAR, PIDILITE, ARDEX ENDURA, MYK ARMENTS,
101	CHEMICAL WATER PROOFING SYSTEM	BASF, FERROUS CRETE, MS BAUCHEMIE, SIKA, SUNANDA, PERMA, FOSROC, DIDILITE
102	APP MODIFIED WATER PROOFING MEMBRANE	SHALIMAR, FERROUS CRETE, PIDILITE, ARDEX ENDURA, HYDROTECH
103	GALVANIZATION	JENCO GROUP, SADHANA ENGINEERING CORPORATION OF STEELITE ENGINEERING LTD./ EIC APPROVED.
104	HYDROPHOBIC COATING	DUPONT, DOW CORNING, EVERCRETE, AQUAMIX/ EIC APPROVED.
105	PVDF COATING	AURA ARCHITECTURAL COATINGS, M. J. COATERS PVT. LTD., S P ARCHITECTURAL COATINGS PVT LTD., AMECO, RADIANT ANODISERS PVT. LTD.
106	GLASS FIBER STRAND	SAINT GOBAIN, NIPPON ELECTRIC GLASS CO. LTD, STERLITE

List of Preferred Makes: Electrical Works

Note:

- The Institute reserves the right to select the manufacturer or make from the List.
- The Institute reserves the right to decide any of the preferred make / Supplier/Manufacturer listed herein & also reserves their rights to add any particular make which is of their choice.
- Item/product/brand/make not meeting the requirements of drawing/BoQ tems/specifications shall not be considered, even though they are listed herein.
- In case of materials in the list, which cannot be made available at site, alternative Supplier / make / Manufacturer conforming to IS / BS, shall be suggested for approval of the Institute.
- If preferred make not mentioned for any items and such items required to be used, then sample shall be submitted for approval.

Sr. No.	MATERIAL	PREFERRED MAKE
1	MCCB (ICS = 100% ICU)	LEGRAND (DPX3), SCHNEIDER COMPACT NSX, L&T- D SINE, SEIMENS 3VL, ABB
2	TIMER	L&T, LEGRAND, SCHNEIDER, SIEMENS, MINILEC
3	CHANGE OVER SWITCH	LEGRAND, SIEMENS, ABB, SCHNEIDER, L&T,
4	MCB, ELCB, RCBO	LEGRAND, SIEMENS, ABB, SCHNEIDER, L&T,
5	MCB DB	LEGRAND, SIEMENS, ABB, SCHNEIDER, L&T,
6	LT CAPACITOR & APFC RELAY	SEIMENS, L&T, SCHNEIDER, ABB, EPCOS, NEPTUNE, LEGRAND
7	LT XLPE CABLE (AL & CU)	FRLS TYPE : R.R. KABEL, HAVELL'S, FINOLEX, POLYCAB
8	INDICATING LAMP (LED) AND PUSH BUTTONS	LED TYPE : SCHNEIDER, L&T, BCH, C&S
9	ALL TYPE OF METER (DIGITAL)	HAVELLS, L&T, SIEMENS, HPL, AE, SCHNEIDER, SECURE, NEPTUNE, ABB
10	C.T. (LT)	AE, KAPPA, L&T
11	ELECTRICAL WIRE	FRLS TYPE : R.R. KABEL, HAVELL'S, FINOLEX, POLYCAB, KEI
12	PVC CONDUIT & ACCESSORIES (ISI)	ASTRAL, PRECISION (PPI), AKG, BEC.
13	MS CONDUIT & ACCESSORIES (ISI)	AKG, BEC, STEEL CRAFT
14	MODULAR TYPE SWITCHES ACESSORIES & METAL BOX	LEGRAND (MYRIUS), MK (ELEMENT), SCHNIEDER (OPALE), L&T (ENGLAZE),
15	CABLE GLANDS	DOWELLS, COMET, BRACO, JAINSONS
16	CABLE LUGS & SOCKETS	DOWELLS, COMET, BRACO, JAINSONS
17	CABLE TRAY- PERFORATED/ LADDER TYPE	OBO, MK, BEC, STEELWAYS, SLOTCO, PILCO, ERICO, BRAVO

Construction of Shed Building for Augmentation of Workshop facility (Extension of Workshop Fabrication yard) at IPR campus.

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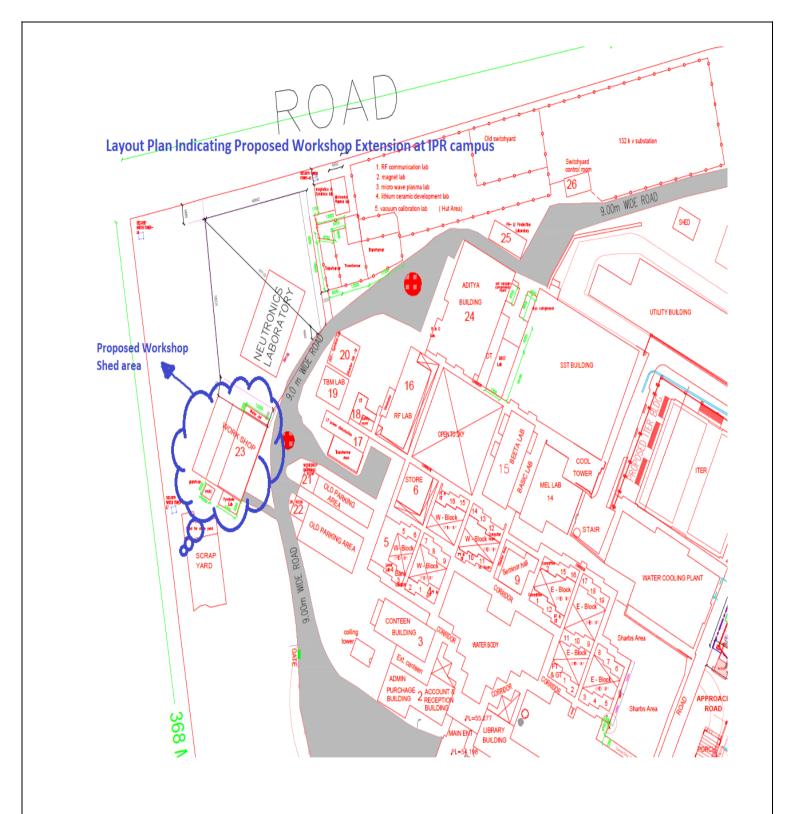
18	UNDER FLOOR RACEWAY	MK, LEGRAND, RMCON	
19	POWER PLUG AND SOCKET IP 66 CLASS PROTECTIO	LEGRAND, SEIMENS, SCHNIEDER, HAGER	
20	RACE WAY	OBO, MK , LEGRAND, SCHNIEDER	
21	FIRE RETARDANT MATERIAL		
22	SPD	LEGRAND, SIEMENS, ABB, SCHNEIDER, L&T,	
23	ALL TYPES OF LIGHT FIXTURES	PHILLIPS, HAVELLS, CROMPTON, WIPRO, OSRAM, BAJAJ	
24	LED LAMPS	PHILLIPS, HAVELLS, CROMPTON, WIPRO, OSRAM, BAJAJ	
25	CEILING FAN	ATOMBERG, HAVELLS, USHA, ORIENT, CROMPTON, BAJAJ, KHAITAN	
26	EXHAUST FAN	ATOMBERG, HAVELLS, USHA, ORIENT, CROMPTON, BAJAJ	
27	JUNCTION BOX (WEATHER PROOF)	HENSEL, SINTEX, NATIONAL	
28	TELEPHONE WIRE	R.R. KABEL, HAVELL'S, FINOLEX, POLYCAB	
29	TELEPHONE ARMOURED CABLE	R.R. KABEL, HAVELL'S, FINOLEX, POLYCAB	
30	TELEPHONE PIN- RJ11	AS SAME AS MAKE OF SWITCH	

List of Preferred Makes: HVAC Works

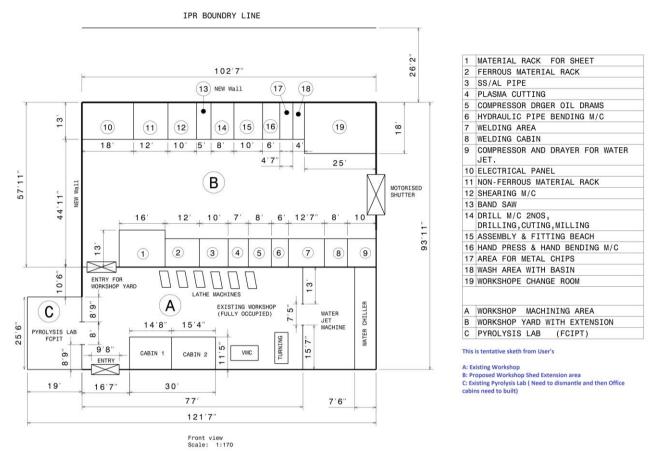
Sr. No.	MATERIAL	PREFERRED MAKE
1	INVERTER-TYPE SPLIT ACS	DAIKIN/VOLTAS/BLUE STAR/HITACHI/LLOYD/MITSUBISHI/CARRIER/S AMSUNG/GODREJ/LG/IPR APPROVED.
2	INDUSTRIAL AIR COOLER	SYMPHONY/ KAPSUN (ANTARCTICA)/ ECOAIR/ EVAPOLER/IPR APPROVED.

List of Preferred Makes: Mechanical works

Sr. No.	MATERIAL	PREFERRED MAKE
1	EOT CRANE	SIMPLEX CRANE, HI-TECH, SAFEX, IPR APPROVED
2	ROLLING SHUTTER	AVIANS, GANDHI, IPR APPROVED



Tentative Sketch to show workshop layout with machinery details



WORKSHOP LAYOUT

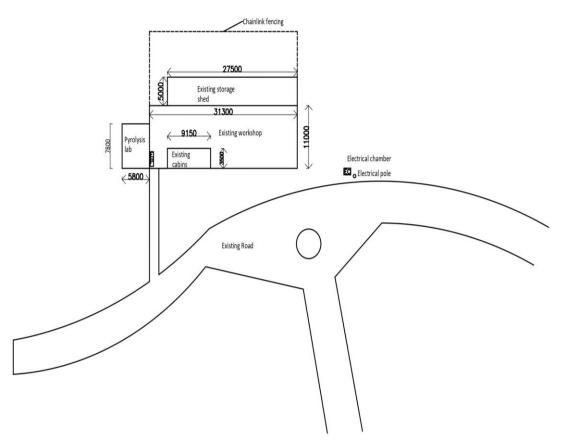
Note: This sketch is tentative layout to show workshop layout

Block A: Existing workshop

Block B: Proposed Workshop Shed (Individual Building), there shall be gap/space between existing workshop and proposed workshop as per design requirements. This gap/space area shall be provided roofing with PIR panels and this space shall be leak proof.

Block C: Proposed Office cabins area

Tentative Drawing for current site condition of Proposed Workshop Shed at IPR



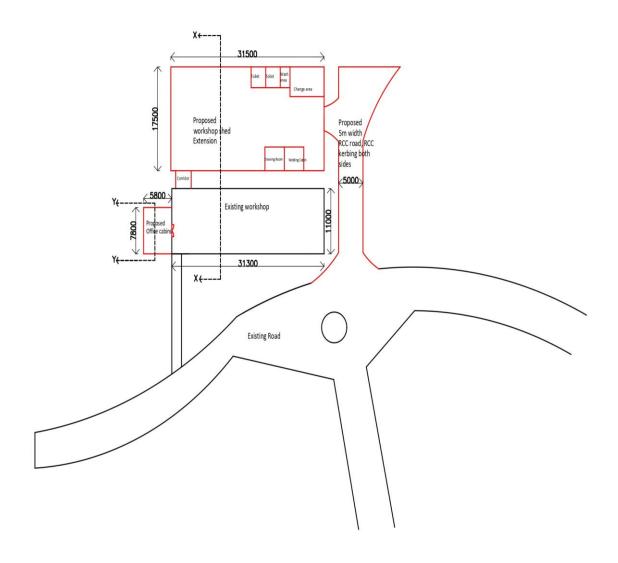
Approx Sketch for current site condition for proposed Workshop Shed Extension at IPR Campus

Note: All dimensions are in mm and approx values.

- 1. Existing storage shed & chain link fencing shall be dismantle and then Proposed Workshop Shed need to built.
- 2. Pyrolysis Lab shall be modified and then accordingly Office cabins shall be built with partitions.
- 3. Existing Cabins need to dismantle.
- 4. EP: Existing Electrical panels need to relocate to Proposed Workshop Shed as per IPR instructions.
- 5. Electrical Chamber & Electrical Pole needs to be relocate as per IPR instructions.

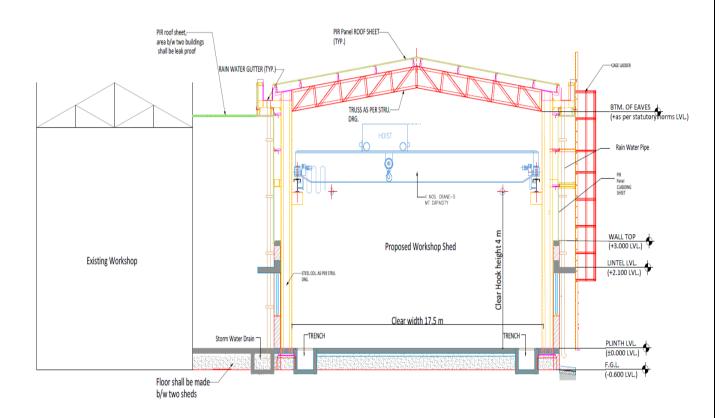
Note: This approximate sketch provides a rough representation of the current site conditions. We highly recommends and expect all potential bidders to carry out an on-site inspection to thoroughly evaluate the existing conditions. This visit is essential to confirm details such as the topography, levels, existing structures, sheds/areas earmarked for dismantling, the locations of electrical panels-chamber-pole to relocate, and any other relevant factors that may impact your assumptions and quotations.

Tentative Plan Drawing of Proposed Extension of Workshop Shed at IPR



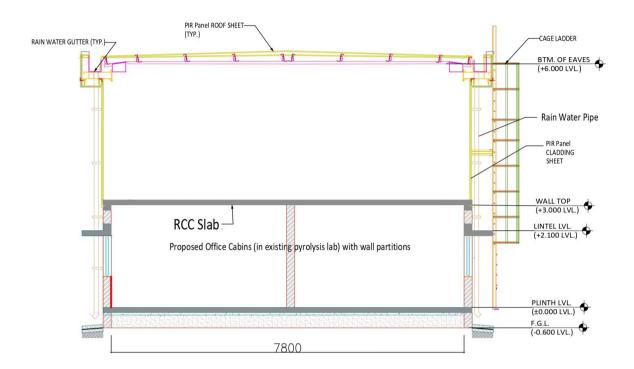
Tentative Sketch for proposed workshop shed extension at IPR Campus Note: All dimensions are in mm

Tentative Drawing of Sectional View along X-X as shown in the PLAN



Sectional View X-X

Tentative Drawing of Sectional View along Y-Y as shown in the PLAN



Sectional View Y-Y

Workshop Equipment Details

Existing Load					
Sr.					
No.	Machine Details	Rating in Amp of switch gear			
1	Water Jet	125			
2	Compressor Water Jet	32			
3	CNC Turning	63			
4	CNC VMC	63			
5	Compressor VMC	32			
6	Radial Drill	32			
7	Bench Drill-1	32			
8	Bench Drill-2	32			
9	Bench Grinder-1	32			
10	Milling Machine	32			
11	Lathe Craftmaster	32			
12	Lathe Kirloskar-1	32			
13	Lathe Kirloskar-2	32			
14	Lathe Pinacho	32			
15	Lathe HMT	63			
16	Lathe Bombay	63			
17	Machining Area Crane	32			
18	Shearing Machine	32			
19	Air Plasma Cutting Machine	32			
20	Compressor Plasma Cutting Machine	16			
21	Band Saw Cutting	32			
22	Bench Drill-3	32			
23	Bench Drill-4	32			
24	Milling cum Drilling Machine	16			
25	Bench Grinder-2	16			
26	Bench Grinder-3	16			
27	S J Jadeja Welding	Single Phase			
28	Vijay Vasava Welding	32			
29	Alu Welding	125			
30	MS ARC Welding	125			
31	Bending Machine	100			
32	Hydraulic Shearing Machine	63			
33	AC Ducting	63			

Note : The contractor has to lay cables of required size and length from equipment to main LT panel as instructed by EIC.