



प्लाज़्मा अनुसंधान संस्थान  
Institute for Plasma Research

भाट, इंदिरा पुल के पास, गांधीनगर - 382 428

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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/09/2021

E-Tender Notice No.: IPR/TN/CIVIL-PR/09/2021

#### **कार्य का नाम:**

#### **Name of Work:**

जीआईडीसी, सेक्टर -25, गांधीनगर, गुजरात में स्थित आईपीआर के एफसीआईपीटी कैंपस में शेड बिल्डिंग के निर्माण का डिजाइन, निर्माण और हस्तांतरण, के आधार पर डिजाइनिंग सहित, वैधानिक अनुमति प्राप्त करना, सुविधा के उपयोग हेतु निर्माण करना एवं प्लाज़्मा अनुसंधान संस्थान (आईपीआर) को सुपुर्द करना।

**Construction of Shed Building at FCIPT campus of IPR, GIDC, Sector -25, Gandhinagar, 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 **अध्यक्ष, (I-CDC)**

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

इंदिरा पुल के पास, भाट

गांधीनगर-382428

Name and Address of

Tender Inviting Authority:

**Chairperson, I-CDC**

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.

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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 two works.

| <b>TENDER NOTICE NO: IPR/TN/CIVIL-PR/09/2021</b> |                      |  |
|--|----------------------|--|
| <b>1</b>   | <b>कार्य का नाम:</b> | जीआईडीसी, सेक्टर -25, गांधीनगर, गुजरात में स्थित आईपीआर के एफसीआईपीटी कैंपस में शेड बिल्डिंग के निर्माण का डिजाइन, निर्माण और हस्तांतरण, के आधार पर डिजाइनिंग सहित, वैधानिक अनुमति प्राप्त करना, सुविधा के उपयोग हेतु निर्माण करना एवं प्लाज्मा अनुसंधान संस्थान (आईपीआर) को सुपुर्द करना।   |
|  | Name of Work         | <b>Construction of Shed Building at FCIPT campus</b> of IPR, GIDC, Sector -25, Gandhinagar, Gujarat on <b>Design, Build and Transfer Basis</b> including <b>Designing</b> , obtaining <b>Statutory permissions</b> , <b>Construction (Build)</b> to make facility for use <b>and Transfer</b> to Institute for Plasma Research (IPR).  |
| <b>TENDER NOTICE NO: IPR/TN/CIVIL-PR/10/2021</b> |                      |  |
| <b>2</b>   | <b>कार्य का नाम:</b> | आईपीआर कैंपस, प्लाज्मा 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 अनुमति प्राप्त करना, सुविधा के उपयोग हेतु निर्माण करना एवं प्लाज्मा अनुसंधान संस्थान (आईपीआर) को सुपुर्द करना।  |
|  | Name of Work         | <b>Construction of Shed Building for Augmentation of Workshop facility ( Extension of Workshop Fabrication yard) at IPR campus</b> , Institute for Plasma Research , Bhat , Gandhinagar -382428, Gujarat on <b>Design, Build and Transfer Basis</b> including <b>Designing</b> , obtaining <b>Statutory permissions</b> , <b>Construction (Build)</b> to make facility for use <b>and Transfer</b> to Institute for Plasma Research (IPR). |

उपरक्त दोनों कार्यों के लिए निविदा दस्तावेज विस्तृत निविदा सूचना के साथ <https://eprocure.gov.in/eprocure/app> पर निशुल्क देखने 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 वेबसाइट 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-icdc@ipr.res.in](mailto:support-icdc@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

- 1) 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 / e-mail 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

- 1) 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.

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#### **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.

## **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 order dated: 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.
- 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 Nodal Ministry/ 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-neighbours.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 **ELIGIBILITY DECLARATIONS FROM SPECIFIED COUNTRIES** order as per **Annexure-II** 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.   | <b><u>IPR/TN/CIVIL-PR/09/2021</u></b>  |
| 2 | कार्य का नाम<br><br>Name of work  | <p>जीआईडीसी, सेक्टर -25, गांधीनगर, गुजरात में स्थित आईपीआर के एफसीआईपीटी कैंपस में शेड बिल्डिंग के निर्माण का डिजाइन, निर्माण और हस्तांतरण, के आधार पर डिजाइनिंग सहित, वैधानिक अनुमति प्राप्त करना, सुविधा के उपयोग हेतु निर्माण करना एवं प्लाज़्मा अनुसंधान संस्थान (आईपीआर) को सुपुर्द करना।</p> <p><b>Construction of Shed Building at FCIPT campus of IPR, GIDC, Sector -25, Gandhinagar, 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).</b></p> |
| 3 | परियोजना की अनुमानित कुल लागत (डिजाइन करना, वैधानिक क अनुमति प्राप्त करना, सभी उपयोगी सामग्रियों के साथ निर्माण कार्य एवं दो साल के लिए व्यापक रखरखाव)<br><b>Estimated Total Cost of Project (Design, Obtaining statutory permissions and Construction works (Build) including all utilities and Comprehensive Maintenance for Two years)</b> | <p>1.75 करोड रुपये (अनुमानित)</p> <p><b>Rs. 1.75 Crore (Approx.)</b></p>   |



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| 8  | सुरक्षा जमा राशि<br>Security Deposit  | निविदा मूल्य का 2.5% बिलों से काट लिया जाएगा।<br>2.5% of the Tendered Value shall be deducted from the bills.  |
| 9  | <b>CPP Portal</b> वेबसाइट<br><a href="https://eprocure.gov.in/eprocure/app">https://eprocure.gov.in/eprocure/app</a><br>पर देखने तथा डाउनलोड करने के लिए निवेदा दस्तावेज़ की उपलब्धता<br><br>Availability of Tender Documents for view and download <b>on CPP portal website</b><br><a href="https://eprocure.gov.in/eprocure/app">https://eprocure.gov.in/eprocure/app</a> | दि. 14/12/2021 को प्रातः 10:00 से 01/02/2022 को 13:00 बजे तक<br><br><b>From 10:00 Hours on 14/12/2021 Up to 13:00 Hours on 01/02/2022.</b>   |
| 10 | साइट विजिट, यदि हो तो<br>Site Visit, if any   | एजेंसियों द्वारा साइट विजिट(यदि हो) -दि. <b>04/01/2022</b> को 15:00 बजे तक<br>संपर्क अधिकारी - श्री शैलेन्द्र त्रिवेदी, प्रभारी अधिकारी, e-tender, प्लाज़्मा अनुसंधान संस्थान, इंदिरा पुल के पास, भाट, गांधीनगर-382428. प्राथमिकता से ईमेल द्वारा: etender.icdc@ipr.res.in या दूरभाष नंबर: -079-2396 2000, 2396 4009 के माध्यम से<br><br>Site visit by Agencies (if any) - up to 15:00 Hours on <b>04/01/2022.</b><br><br>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<br>Pre-bid clarification.   | आवेदक CPP portal वेबसाइट <a href="https://eprocure.gov.in/eprocure/app">https://eprocure.gov.in/eprocure/app</a> पर अपने प्रश्नों को अपलोड करके दि. <b>07/01/2022</b> को 15:00 बजे तक निविदा दस्तावेज़ के बारे में स्पष्टीकरण मांग सकता है।<br><br>The applicant can seek clarifications regarding Tender document up to <b>15:00 Hours on 07/01/2022</b> by uploading their queries on CPP portal website <a href="https://eprocure.gov.in/eprocure/app">https://eprocure.gov.in/eprocure/app</a>   |

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|    |   | The clarifications will be uploaded on the same web portal by <b>15:00 Hours on 19/01/2022</b><br>स्पष्टीकरण दि. <b>19/01/2022</b> को <b>15:00</b> बजे तक उसी वेब पोर्टल पर अपलोड किया जाएगा।  |
| 12 | निविदाओं के ऑनलाइन जमा करने की आरंभ तारीख और समय<br>Start date and time of online submission of tenders   | दि. <b>20/01/2022</b> को <b>13:00</b> बजे से<br><b>From 13:00 Hours on 20/01/2022.</b>   |
| 13 | निविदाओं के ऑनलाइन जमा करने की अंतिम तारीख और समय<br>Last date and time of closing of online submission of tenders  | दि. <b>01/02/2022</b> को <b>13:00</b> बजे तक<br><b>13:00 Hours on 01/02/2022.</b>  |
| 14 | बयाना राशि जमा के लिए बोली सुरक्षा घोषणा प्रपत्र जमा करने की अंतिम तारीख।<br><br>Last date for submission of Bid Security Declaration form towards EMD.       | श्री शैलेन्द्र त्रिवेदी, प्रभारी अधिकारी (e-tender), प्लाज़्मा अनुसंधान संस्थान, भाट, गांधीनगर-382428 के कार्यालय में दि. <b>02/02/2022</b> को <b>13:00</b> बजे या उससे पहले<br>दूरभाष सं. 079 23962000, 079-23964009<br><br>On or before <b>13:00 Hours on 02/02/2022</b> in the Office of Mr. Shailendra. Trivedi , Officer In-charge (e-tender) , Institute for Plasma Research, Near Indira Bridge, Bhat, Gandhinagar -382428 Phone no. 079 23962000, 079-23964009 |
| 15 | तकनीकी बोली (भाग-I) के ऑनलाइन खोलने की तारीख और समय<br><br>Date and time of online opening of Technical Bid (Part -I)   | दि. <b>02/02/2022</b> को <b>15:00</b> बजे तकनीकी बोली (भाग-I) प्लाज़्मा अनुसंधान संस्थान, भाट, गांधीनगर-382428 में ऊपर दर्शाई गई तारीख और समय पर खोली जाएगी।<br><b>On 02/02/2022 at 15:00 Hours</b><br><br><b>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.</b>   |
| 16 | अर्हता प्राप्त बोलीकर्ताओं की वित्तीय बोलियों (भाग-II) के खुलने की तारीख और समय।<br>Date of opening of Price Bids (Part -II) of Technically qualified bidders | इसकी सूचना बाद में दी जाएगी।<br><br>Will be notified at a later date.  |

## **(II) BRIEF PARTICULARS OF THE WORK**

Institute is having existing FCIPT campus at A-10/B, G.I.D.C. Electronics Estate, Sector 25, Gandhinagar - 382044, Gujarat, India.

The existing FCIPT campus land area is 25684 Sqm and total existing Built up area constructed is approx. 3490 Sqm,

The Institute desires to construct following building on the basis of Design, Obtaining Statutory Permissions, Construction (Build) and Transfer to IPR and maintenance of building with all utility services for period of two years.

**Construction of a Shed Building** (Approx. Building carpet area **460 Sqm**). The broad scope of work and minimum requirements of Building services and single line along with Sketch of proposed building is attached in this technical bid.

The location of building site is at existing Facilitation Centre for Industrial Plasma Technologies (FCIPT) Institute for Plasma Research , A-10/B, G.I.D.C. Electronics Estate, Sector 25, Gandhinagar - 382044, Gujarat, India.

### **(III) BROAD SCOPE OF WORK and REQUIREMENTS**

#### **(A) Broad Scope of Works:**

The land is available at FCIPT campus.

The broad scope of work consists of

##### **(a) Design :**

1. Carrying out Topographical Survey
2. Carrying out Site Survey of existing building & Utility services
3. Carrying out Soil Investigations (Geo-Technical Investigations) for proposed site.
4. Designing of proposed Building and Utility services
  - i) Architectural,
  - ii) Civil works
  - iii) Structural,
  - iv) Proof Checking of Structural design by IIT/ NIT,
  - v) PH works (Plumbing , Sanitary , Water Supply & Drainage) - Internal & External
  - vi) Electrical works - Internal & External,
  - vii) HVAC works,
  - viii) Mechanical including Crane, Rolling shutters, openings, etc.
  - ix) Fire Detection & Fire Protection and Fire Fighting & Safety works
  - x) General Development works including Roads, Storm water drain, Street light, water supply, drainage, loading & unloading platforms etc.)

The broad requirements are given by IPR in this tender and design should be in accordance with respective 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 shall consider seismic and all the other 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 personnel for all other utility services.
7. The contractor shall submit design and drawings and obtain consent/ confirmation of IPR on the fulfilment of the Requirements from the Institute for Plasma Research.
8. 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.

9. The Contractor shall provide the Institute, Four set of approved preliminary drawings and Six sets of execution drawings and “As built” in hard copy as well as in Soft copies (Autocad & pdf) 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 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 the statutory charges.

**(c) Construction ( Build) :**

1. Construction of Building & General Development including all Utility services such as Civil, Structural, PH works (Plumbing , Sanitary , Water Supply & Drainage) - Internal & External, Electrical works - Internal & External, Mechanical including Crane, Rolling shutters, openings, etc. , HVAC works , Fire Detection & Fire Protection and Fire Fighting & Safety works and General Development works including Roads, Storm water drain, Street light, water supply, drainage, loading & unloading platforms etc.
2. The Construction is inclusive of providing all materials, labour, etc. complete, so as the building is useable for the purpose and requirements it is constructed.
3. The materials and workmanship of the construction work should be confirming to respective applicable IS codes /National Building Code and best standard practices for construction works.
4. The execution of work shall be supervised through requisite number of qualified and experienced Engineers at site on full time basis to supervise the day to day works and also shall be responsible for monitoring of the progress of work as per approved drawings, construction procedures and practices and to ensure quality in day to day work as per specifications and standards. The contractor shall be responsible for deployment of qualified and experienced safety officer/Engineer for full time at site.
5. The contractor shall maintain all the documents and records required by various statutory authorities and any other register/ records as advised by Institute and as

per CPWD guidelines. These documents shall be submitted to the Institute as and when asked by Institute and handover the same after completion of the project.

6. 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.
7. The quality of the materials and workmanship shall be per specification, relevant codes and as per Sound Engineering practices and maintain necessary records. The mandatory tests to be conducted for all materials & workmanship and that should confirm as per specifications and relevant IS standards.
8. The contractor shall ensure that contractors have taken requisite insurance to cover their workmans' under 'Workmen's Compensation Act' as per the contract. The contractor shall ensure that all such policies remain in force throughout the execution of project.
9. The Contractor should take all necessary safety precautions at work site for Workers and personnel. The safety Instruction and Safety Protocol shall be obtained from Institute before start of work. The Contractor is solely responsible for safety of Workers and Personnel at site.
10. The contractor should take all necessary precautions of safety of Building & Structure and also existing structures and existing services of the Institute.
11. The contractor shall also have taken 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
12. It is also inclusive of providing and executing with necessary consumables, equipment, 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 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.

**(d) Transfer :**

The Building including all services shall be transferred to IPR after completion of all works and obtaining all statutory permission including Building Use permission.

All Project details with As-built drawings, documents and maintenance manuals, Statutory Building user Permissions documents, Guarantee / Warranty certificate, 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 (.pdf and Autocad).

**(e) Defect liability period Maintenance of Building and Utility Services:**

**(i) Defect Liability period:**

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

The contractor shall also 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 in-adequacy in the work so 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 to rectify the same by Institute from the third agency from the payment due and payable to the contractor

**(ii) Maintenance period:**

**The maintenance Period is Two years from the date of handing over of Building including Utility services to IPR. The Building and all Utility services shall be maintained for a period of Two years after handing over of Building and services to IPR. The maintenance shall be comprehensive including all Materials and Labour, etc. complete.**

The contractor shall also carry out detailed inspection during maintenance period and get rectified / repair all defects noticed during such inspection or notified by Institute.

In case, despite the specific request by the Institute to the contractor to rectify or repair 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/ repair 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 to rectify/ repair the same by Institute from the third 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 site of work and verify for themselves the site conditions, levels, topography, existing structures and other relevant & allied factors which have bearing on their assumption and quotes.
2. The work shall be carried out according to the design/drawings developed by the successful bidder to whom the work is awarded and approved by the Institute for Plasma Research (IPR)
3. The necessary layout and details are to be developed by successful bidder to whom the work is awarded, 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. The 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 them.
9. The Contractor should maintain all the documents required by various statutory authorities.
10. The contractor shall submit physical progress reports once every month or as desired by Institute.
11. The Contractor shall arrange for Temporary Electrical Power and Water required for construction work at their own cost.
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 after 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 the works that are required to complete the project and 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 and **Comprehensive maintenance of building with all utility services period of for a period of two years** from the date of handing over of the building including all Utility services.

## (B) Minimum Requirements of the Project

**The Shed building is required for set up of Plasma Pyrolysis system and Plasma Nitriding system.**

| Sr No. | Description            | Basic minimum Requirements (Providing, Erecting, fixing, Supply Installation Testing & Commissioning including all materials and labour etc. complete.)   | Remarks   |
|--------|------------------------|---|---|
|        | <b>Shed Building :</b> | <p><b>1. Plasma Pyrolysis Area (see attached sketches):</b></p> <p>This consist of Area for</p> <ol style="list-style-type: none"> <li>Plasma Pyrolysis shed of 30 m (L) x 10 m (W) x Clear height under Crane hook 8 m ,</li> <li>Waste storage area of 10 m (L) x 5 m (W) X Clear height 8 m with ceiling,</li> <li>N&amp; O Gen Set of 6 m (L) x 5 m (W) X Clear height 8 m with ceiling</li> <li>Power supply room - 5 m (L) x 4 (W) x clear height 4 m with ceiling</li> <li>Control room - 5 m (L) x 4 (W) x clear height 4 m with ceiling</li> <li>Toilet and Wash area</li> <li>Open Platform at Plinth level of Building - 10 m (L) x 3 m (W) for Equipments</li> <li>Open Platform at Plinth level of Building - 10 m (L) x 3 m (W) for loading unloading</li> <li><b>Special Equipment Foundation is required for 40 Tonne Load (covering 2.5 m x 2.5 m = 6.25 Sqm area) See attached drawing.</b></li> </ol> <p><b>2. Plasma Nitriding Area (see attached sketches):</b></p> <p>This consist of Area for</p> <ol style="list-style-type: none"> <li>Plasma Nitriding Shed of 12 m (L) x 10 m (W) x Clear height under Crane hook 8 m</li> <li>Open Platform at Plinth level of Building - 10 m (L) x 3 m (W) for Chiller , Hydrogen Gas and Nitrogen Gas</li> <li>Open Platform at Plinth level of Building - 10 m (L) x 3 m (W) for Loading and unloading bay</li> </ol> <p><b>3. Any other Space required for Utility services</b> such as Electrical Power panel, Forced Ventilation, etc. while designing , the same shall be considered in addition to carpet area specified above.</p> <p><b>4. RCC Road</b> of Minimum 4 m width on all four sides of Building with turning radius for Truck movement</p> <p>Note: The height mentioned above is minimum clear height under crane hook. The additional for Crane Installation and statutory clearance above crane shall be added to the Building height.</p> | <p>Plasma Pyrolysis System will generate the Combustible Gases which will be burnt in other chamber. Proper Natural Ventilation is required. The Plasma Pyrolysis system area external wall shall be provided with Weld Mesh kind of Provision at the top of entire external Walls. However, It should be ensure in the design that there should not be water ingress during Rainy season through this ventilation Provision.</p> |

|           |   |  |  |
|-----------|---|--|--|
|           | <b>Civil and Structural Requirements</b>          |  |  |
| <b>2.</b> | <b>Foundations &amp; Works up to Plinth level</b> | <ul style="list-style-type: none"> <li>a. RCC Structure with RCC foundations, RCC Columns and RCC Beams</li> <li>b. Plinth retaining structure below Plinth level Brick work with RCC beams or RCC Walls/pardi .</li> <li>c. Plinth level shall be minimum 600 mm up from the existing RCC Road.</li> <li>d. Plinth filling with well compacted good earth Murom / Sand Filling, PCC and RCC Flooring Base.</li> </ul>   |  |
| <b>3.</b> | <b>Super Structure of Building</b>                | Steel Structure building with Conventional Steel Sections or Pre-Engineered Steel Sections with paint along with support structure for 10 T EOT crane.   |  |
| <b>4.</b> | <b>Walls</b>                                      | <p>1. Steel Structure Building with conventional brick masonry walls with Plaster &amp; Paint up to 3 m height from Plinth level and remaining height up to top of the Building Pre-coated colour GI / Galvalume Corrugated / Profile sheets along with required openings.</p> <p>Partition are required up to 4 m height.</p> <ul style="list-style-type: none"> <li>a. There shall not be any partition between Plasma Pyrolysis area and Plasma Nitriding area as the Crane movement is required in the entire building.</li> <li>b. Between Power supply room and control room</li> <li>c. Between Waste storage area and N&amp; O Gen set</li> <li>d. Between Plasma pyrolysis area and Waste storage area and N&amp; O Gen set and Toilet &amp; Wash area</li> </ul> <p>The Building shall be leak proof.</p> <p><b>Note:</b> Plasma Pyrolysis System will generate the Combustible Gases which will be burnt in other chamber. Proper Natural Ventilation is required. Weldmesh Grill of about <b>approx. 1.5 m height</b> shall be provided in the external wall of building in Plasma Pyrolysis area for Ventilation. However, It shall be ensured in the design that there should not be water ingress during Rainy season through this ventilation.</p> |  |



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| 5. | <b>Roof</b>     | Roof with Pre-coated colour GI/ Galvalume Corrugated / Profile sheets with required slope and Rain water gutter and down take pipe.<br><br>The Building shall be leak proof.  |   |
| 6. | <b>Flooring</b> | <p>1. <b>Plasma Pyrolysis area:</b></p> <p>j) RCC Tremix Concrete flooring for 3T/ Sqm<br/>Floor loading capacity in entire floor area and <b>Special Equipment Foundation is required</b> for 40 Tonne Load (covering 2.5 m x 2.5 m = 6.25 Sqm area) See attached drawing.</p> <p>2. <b>Plasma Nitriding area:</b><br/>RCC Tremix Concrete flooring for 5T/ Sqm<br/>Floor loading capacity in entire floor area</p>  |   |
| 7  | <b>Doors :</b>  | <p><b>Minimum Doors required</b></p> <p><b>(a) Plasma Pyrolysis area :</b></p> <ol style="list-style-type: none"> <li>1. Main entrance Door - Clear 2.3 m x 3.0 m - 2 No for movement from Outside to Inside of Building with canopy and Steps &amp; Ramp</li> <li>2. Shutter Doors - Clear 2.3 m x 3.0 m - 4 No - Waste Storage area , N&amp; O Genset</li> <li>3. Shutter for Control Room and Power Supply Room - Door of Clear width of 1.5 m x 2.1 m - 2 No</li> <li>4. Door for Toilet &amp; Wash area</li> </ol> <p><b>(b) Plasma Nitriding area :</b><br/>Main entrance Door - Clear 2.3 m x 3.0 m - 2 No for movement from Outside to Inside of Building with canopy and Steps &amp; Ramp</p> <p>All the external openings shall be provided with Weather shed of appropriate width and length to protect against ingress of rain water.</p> | <p>Aluminium section frame with 25 micron anodizing and Door shutter of Wooden Exterior grade Ply with laminate on both the sides.</p> <p>Aluminium section frame with 25 micron anodizing and Door shutter of Door shutter of Wooden Exterior grade Ply with laminate on both the sides.</p> <p>Aluminium section frame with 25 micron anodizing and Glass panels.</p> <p>Aluminium section frame with 25 micron anodizing and Door shutter of Wooden Solid board with laminate on both the sides.</p> <p>Aluminium section frame with 25 micron anodizing and Door shutter of Wooden Exterior grade Ply with laminate on both the sides</p> |

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| 8.  | <b>Rolling Shutters</b>   | <p><b>Motorised Rolling Shutters with all accessories.</b></p> <p><b>1. Plasma Pyrolysis area:</b><br/>Loading Unloading bay - Entrance 4 m (W) x 6 m (clear Height) - 1 No.</p> <p><b>2. Plasma Nitriding area:</b><br/>6 m (W) x 7 m (clear Height) - 1 No.<br/>All the external openings shall be provided with Weather shed of appropriate width and length to protect against ingress of rain water.</p>  | Motorised Pre colour coated GI / Galvalume Rolling Shutter  |
| 9.  | <b>Windows</b>  | <p>Windows shall be provided for Natural light and ventilation, opening area as per National Building code and good architectural and engineering practices.</p> <p>All the external openings shall be provided with Weather shed of appropriate width and length to protect against ingress of rain water.</p>  | <p>Aluminium Section Sliding/ openable windows with Clear Glass.</p> <p>The Windows shall be provided with MS grills.</p> |
| 10. | <b>Ventilation / Openings</b>   | <p>Weldmesh kind of the Grill of about <b>approx. 1.5 m height</b> shall be provided in the external wall of building in Plasma Pyrolysis area for Ventilation.</p> <p>Note: Plasma Pyrolysis System will generate the Combustible Gases which will be burnt in other chamber. Proper Natural Ventilation is required. However, It should be ensure in the design that there should not be water ingress during Rainy season through this ventilation Provision.</p>   |   |
| 11. | <p><b>Three Toilets :</b></p> <p><b>One for Ladies,</b></p> <p><b>One for Gents and</b></p> <p><b>one for Divyangjan toilet</b></p> | <p>Each Toilet shall consist of atleast following :</p> <ol style="list-style-type: none"> <li>1. Vitrified tiles antiskid flooring</li> <li>2. Vitrified tiles dado up to lintel level i.e. up to 2.1 m</li> <li>1. Wash basin (WB) - Sensor based Pillar Cock, Angle cock , PVC connections , waste coupling, Bottle trap,etc. complete</li> <li>3. Water Closet (WC)- WC, Health Faucet , Metropole, seat cover, etc. complete</li> <li>4. Urinal for Gents Toilet with Sensor based flush system</li> <li>3. One Tap</li> <li>4. Mirror</li> <li>5. Liquid soap container</li> </ol> <p>Etc. compete with water supply and drainage lines.</p> |   |

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| 12       | <b>General requirements</b>   | <p>1. 4m wide RCC Tremix Road with curbing on all around the building with necessary turning radius for movement of truck.</p> <p>2. Storm water lines with necessary Chamber and grills, etc complete.</p> <p>3. External Drainage lines with Manhole Chambers and connection with existing drainage system.</p> <p>4. Water supply line from existing Pump Hose - Hydro-pneumatic system with necessary control valves to this Building.</p>  |  |
| 13       | <b>Painting internal surfaces (Plastered / Cement Board, Partition, etc.)</b> | Two or more coats of SUPER/PREMIUM ACRYLIC EMULSION with Primer and Putty   |  |
| 14       | <b>Painting of external plastered surfaces of approved colour</b>             | Two or more coats of 100% ACRYLIC EXTERIOR EMULSION PAINT   |  |
| <b>B</b> | <b>Electrical Work.</b>   |   |  |
| 1.       | <b>Lighting</b>   | 1. <b>General Lighting for entire building</b> with suitable LED light fixtures suspended from Roof Level for uniform illumination of 300 Lux at 1 m above floor level.   |  |
| 2.       | <b>Power Plug Points</b>  | <p><b>Power Plug Points</b></p> <p><b>Plasma Pyrolysis area:</b></p> <ol style="list-style-type: none"> <li>5 / 15 amp Plug Points - <b>50 Nos.</b></li> <li>Three Phase 32 amp industrial Plug points - <b>10 Nos.</b></li> <li>Three phase 100 Amp industrial Plug Point- <b>5 Nos.</b></li> </ol> <p><b>Plasma Nitriding area:</b></p> <ol style="list-style-type: none"> <li>5 / 15 amp Plug Points - Nil.</li> <li>Three Phase 32 amp industrial Plug points - Nil.</li> <li>Three Phase 100 Amp Industrial Plug Point- Nil.</li> </ol> <p><b>General : Power arrangement for</b></p> <ol style="list-style-type: none"> <li>Crane</li> <li>Air Conditioners</li> <li>Motorized Rolling shutters</li> <li>For all the other Electrical fixtures provided by the contractor in the building.</li> </ol> |  |

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| <b>3.</b> | <b>General</b>   | Street lights on road as per National Building Code (minimum 60 Lux level at 1 m height from road level). with suitable LED light fixtures.   |  |
| <b>4.</b> | <b>Distribution Panel and control switches</b>             | <ol style="list-style-type: none"> <li>1. Main LT Panel as per Electrical Load of Building</li> <li>2. Lighting Distribution LT Panels and Control switches as per Electrical load</li> <li>3. Power Plug Distribution LT Panels and Control switches as per Electrical load</li> <li>4. One additional LT Panel for 300 KW - power from DG set. (DG set is to be arranged by USER, IPR)</li> <li>5. One additional Main LT Panel for 100 KW power distribution for User Equipments</li> </ol>  |  |
| <b>5.</b> | <b>Earthing</b>  | <ol style="list-style-type: none"> <li>1. Earthing of complete building lighting and power distribution system.</li> <li>2. Additional Industrial Grounding type earth pits 8 Nos for User Equipment.</li> <li>3. Earthing for Building Steel Structure</li> </ol>  |  |
| <b>6.</b> | <b>Power Connection from existing Source within campus</b> | All modifications / New panel as required at the source end LT Panel and cabling from source to LT panels in Building.  |  |
| <b>7.</b> | <b>Lightening protection System</b>                        | Lighting protection system shall be installed on Building.  |  |
| <b>C</b>  | <b>Mechanical works</b>                                    |   |  |
| <b>1.</b> |  | <p>Remote operated <b>Single Girder EOT Crane</b> (EOT crane of 10 ton Hoisting Capacity of main hook, and 1 Ton hoisting capacity of Auxiliary hook travel length entire Building.</p> <p>Crane Span : approx. 10 m (as per Actual Building width )</p> <p>Longitudinal Travel length of crane: approx. 42 m (as per Actual Building Length )</p> <p>Lifting range - 8 meters Hook height</p> <p>Long Travel Speed - 15 meter per Minute</p> <p>Cross Travel Speed - 15 meter per Minute</p> <p>Main Hoist Lifting speed - 3 meter per Minute</p> <p>All necessary arrangement for support structure , Power arrangement, pendent and Remote control etc. complete</p> |  |
| <b>D</b>  | <b>HVAC works</b>  |   |  |

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| 1. |          | <p>Supply Installation Testing and commissioning of Inverter Compressor &amp; Five star rating and copper condensing pipes</p> <ol style="list-style-type: none"> <li>1. Minimum 2 Ton split Air Conditioners -2Nos in Control Room</li> <li>2. Minimum 2 Ton split Air Conditioners -2 Nos in Power supply room.</li> </ol>  |  |
| E  | PH works |   |  |
| 1. |          | <ol style="list-style-type: none"> <li>1. External Water supply line of GI pipes with anti-corrosive paints or Scheule 80 Pipes with control valves for External Lines from source to building buried in the Ground.</li> <li>2. Internal Distribution lines with schedule 80 pipes concealed in walls with control vlave.</li> <li>3. External Drainage RCC hume lines with Manholes and connection in existing drainage line.</li> <li>4. External Rain water drainage RCC hume pipe lines with manholes with Grating.</li> </ol> |  |

## (IV) REQUIREMENTS AND CRITERIA FOR ELIGIBILITY.

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

| Sr. No. | Criteria for Eligibility.   | <b>Documentary proof for the eligibility<br/>(To be Scanned and Uploaded)</b><br>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       | <p>Should have <b>satisfactorily completed in India construction of Building (s)</b> having construction cost of Project as mentioned below , <b>during last 7 years</b> as on ending previous day of last date of submission of tenders:</p> <ul style="list-style-type: none"> <li>i. <b>Three projects</b> each costing not less than <b>Rs. 70 Lakhs</b><br/>(or)</li> <li>ii. <b>Two projects</b> each costing not less than <b>Rs. 105 Lakhs</b><br/>(or)</li> <li>iii. <b>One project</b> costing not less than <b>Rs. 140 Lakhs</b></li> </ul> <p><b>Note:</b><br/> <b>1. Similar work” means Construction of Conventional RCC or Steel Structure buildings.</b></p> <p>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.</p> | <p>Work Orders &amp; 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.</p> <p>Note:</p> <p>Completion certificates for works issued by Private parties shall be supported by TDS (Tax deducted at Source) Certificates for the said cost.</p> |
| 2       | Should have valid minimum Bank solvency of a Scheduled Bank of <b>Rs. 70 lakhs</b>  | Annexure Form “ I ”- Form of Bankers Certificate from a scheduled Bank   |

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| 3 | Should have had minimum average annual financial turnover of <b>Rs. 87 Lakhs</b> of the construction works during the immediate last three years ending <b>31<sup>st</sup> March, 2020</b> .<br><br>Year in which no turnover is shown or Zero turnover, would also be considered for working out the average.  | Annexure -Form “A”: Financial information, Chartered Accountant certificate for the Annual financial turnover showing Profit & Loss. |
| 4 | Should not have incurred any loss (profit after tax should be positive) in more than <b>two years</b> during the last consecutive five years ending on <b>31<sup>st</sup> March, 2020</b> .   | Annexure -Form “A”: Chartered Accountant certificate for the Annual financial turnover showing Profit & Loss.                        |
| 5 | 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.<br><br>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”. | Annexure-I, Self-Certification under preference to Make in India order Certificate   |

**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, individually. 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.<br>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.<br><br>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,<br>Annexure Form “I”- Form of Bankers Certificate from a scheduled Bank  |
| 3  | Proof of Eligibility Criteria No.3<br>Annexure -Form “A”: Financial information, Chartered Accountant certificate for the Annual financial turnover showing Profit & Loss.   |
| 4  | Proof of Eligibility Criteria No.4<br>Annexure -Form “A”: Financial information, Chartered Accountant certificate for the Annual financial turnover showing Profit & Loss.   |
| 5  | Proof of Eligibility Criteria No 5,<br>Annexure-I , Self-Certification under preference to Make in India order Certificate   |
| 6  | Letter of Transmittal as per Format given in this document.  |
| 7  | Bid Security Declaration form.   |
| 8  | FORM “A ” Financial Information  |
| 9  | 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.<br><br>Completion certificates and Work Order / Agreement copy issued by the authority concerned to establish work on hand shall be uploaded.  |
| 10 | Form “C” Details of project Under Execution (Ongoing project) No works shall be left out.<br><br>Work Order / Agreement issued by the authority concerned to establish work on hand shall be uploaded.   |

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| 11 | Performance Reports as per Form-“D” for works mentioned Eligibility criteria 1.   |
| 12 | Form “E”- Organizational Structure  |
| 13 | Form “ F” Details of Administrative and Technical Staff Available with the firm and that Proposed to be deployed to complete the work in time |
| 14 | Form 'G Details of Equipment’s available with the firm.   |
| 15 | Form “H” Form of Curriculum Vitae (CV) of Key Personnel   |
| 16 | Form “ I”: Form of Banker’s Certificate from a Scheduled Bank   |
| 17 | Form “J”- NEFT/RTGS Mandate Form for Payment as per Format given  |
| 18 | Integrity Pact – letter from bidder to the Institute as per format in Tender.   |
| 19 | PAN (Permanent Account Number) Registration / TAN Registration details  |
| 20 | GST Registration Certificate  |
| 21 | Declaration by Bidder   |
| 22 | 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.

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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 bid as specified in NIT above. If any bidder withdraws the offer within the validity period or makes any

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) :**

EMD in the form of Bid Security Declaration form as per format attached need to be only submitted by Bidders.

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

Bids received without Bid Security Declaration form shall be summarily rejected.

Exemption from payment of EMD: The firms registered with Micro & Small Enterprise (MSEs) are exempted from payment of EMD (if applicable) provided valid registration certificate is uploaded along with the offer.

**12. Performance Guarantee :**

- i) The successful bidders shall submit an irrevocable Performance Guarantee of 3% (Three 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 15 days of issue of Letter of Acceptance. This guarantee shall be in the form of fixed deposit / Pay order / Demand Draft of any Scheduled Bank.
- ii) The Performance Guarantee shall be initially valid up to the stipulated date of completion plus 60 days beyond that. In case the time for completion of work gets extended, the contractor shall get the validity of Performance Guarantee extended to cover such extended 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.
- iii) The Engineer-in-Charge shall make a claim under the performance guarantee for amounts to which the Institute 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 consultant 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 Bidders to pay the Institute any amount due, either as agreed by the Bidders 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

### 13. **Security Deposit –**

The bidder whose tender may be accepted 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. No interest shall be payable on the security deposit amount deducted from the running bill and final bill for the security deposit.

Such deductions will be made and held by Institute by way of Security Deposit unless he /she /they has /have deposited the amount of Security at the rate mentioned above in Cash.

The security deposit shall be collected from the running bills and final bill of the Bidders at the rates mentioned above. The same shall be released after completion of defect liability period of One year, subject to settlement of dispute (if any) raised by contractor or by arbitration, where in it shall be refunded after settlement of arbitration.

14. 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.
15. 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.
16. Price Bid is to be separately uploaded.
17. The rates quoted shall include all taxes and levies payable under respective statutes. 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. 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 statutes will be effected from the bill and remitted to the Department concerned.
18. 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.**

19. 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.
20. 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**.
21. 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.
22. If Institute wants to provide any additional clarification it will be uploaded on the e-Tender Portal.
23. Prohibition against use of **IPR's** name without permission for publicity purposes: The Bidders, 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.
24. **Definitions:**
  - 23.1 In this document the following words and expressions have the meaning hereby assigned to them.
  - 23.2 **Applicant/ Tenderer/ Bidder/ Contractor** means the firm who is filling tender / one who has been awarded the work.
  - 23.3 **Year** means “Financial Year” unless stated otherwise
  - 23.4 **Employer or IPR or Institute** means Institute for Plasma Research, Bhat, Gandhinagar
  - 24.5 **Director, IPR** means Director, Institute for Plasma Research, Near Indira Bridge, Bhat, Gandhinagar.
  - 24.6 **The Chairperson I-CDC** means Chairperson Infrastructure and Campus Development Committee, IPR, Bhat Gandhinagar
25. **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.

26. 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.
27. Filled in Tender document with Counter terms & conditions may be rejected.
28. All documents relating to the bid shall be in the English or Hindi language, unless stated otherwise
29. **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.

30. **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 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 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

**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 Earnest Money Deposit**

8.1 EMD in the form of Bid Security Declaration form as per format attached need to be only submitted by Bidders.

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

Bids received without Bid Security Declaration form shall be summarily rejected.

8.2 The Bid Security Declaration form shall be enforced upon the bidders 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.

**8.3 Exemption from payment of EMD:** The firms registered with Micro & Small Enterprise (MSEs) are exempted from payment of EMD (if applicable) provided valid registration certificate is uploaded along with the offer.

## **9.0 Bid prices, rates & taxes**

9.1 The bidder should quote as Lump sum for the job in the Price Bid

9.2 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 statutory 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 statutes. 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 statutes will be effected from the bill and remitted to the Department concerned.

9.2 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.

## **10.0 Currencies of bid and payment**

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

## **11.0 Bid validity**

11.1 The bids submitted shall remain valid for acceptance for a period of **180 days** from the date of opening of the 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

## **12.0 Proposal by bidders**

- 12.1 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.

## **13.0 Submission of the bids**

- 13.1 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.
- 13.2 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.
- 13.3 Any bid received by the IPR after the deadline prescribed above will be rejected.
- 13.4 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.

## **14.0 Bid opening**

- 14.1 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.
- 14.2 The bids without stipulated Bid Security Declaration form and other mandatory documents as per NIT shall be summarily rejected.

14.3 In Two part tenders financial bids of only technically qualified bidders shall be opened.

#### **15.0 Clarification of bids**

15.1 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.

15.2 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.

15.3 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.

#### **16.0 Examination of bids and determination of responsiveness**

16.1 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 Bid Security Declaration form
- (c) Is responsive to the requirements of the bidding documents
- (d) Has been properly signed by authorized signatory as per clause-13.4.

16.2 A responsive bid is one which conforms to all the terms and conditions.

#### **17.0 Notification of award and signing of agreement**

17.1 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.

17.2 The details of award can be seen on web site.

17.3 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.

## **18.0 Corrupt or fraudulent practices**

18.1 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 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.

18.2 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.

## **19.0 Disclosures**

- 19.1 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.
- 20.0 Estimated Cost is given merely as a rough guide.
- 21.0 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.
- 22.0 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 Officer "C" and above. He/She shall also intimate the 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.
- 23.0 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.
24. 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.
25. 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 contractors, shall be decided by draw of lots in the presence of Chairperson, and the lowest contractors those have quoted equal amount of 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.

26. 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.
27. Contractor will not make publicity / presentation of the Drawings / Project / Layouts to any other Parties or media without prior written consent of Institute.
28. 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. Abandonment, Postponement or Curtailment of work:**

It shall be open to the Institute to abandon / Post pone / Curtailment or give up at any stage of the construction of any of the site buildings or any part thereof. In the event of such abandonment or giving up or in the event of termination of the agreement, the contractor shall be paid up to stage of work achieved by the contractor as decided by the Institute.

In case the Contractor abandons the work during the course of the project, the Institute has the right to appoint an alternate Contractor or make an arrangement for carrying out the work of Contractor at the risk and cost of the contractor.

### **2. Termination of Contract**

If the contractor fails to perform any of its obligations under this agreement or if Institute is dissatisfied with the services of the contractor, Institute may issue seven days written notice intimating the contractor of their failures or deficiencies and calling upon contractor to rectify within such time as may be specified in the notice and if the contractor fails to perform such obligation or make good such deficiencies as pointed out to the contractor in the notice, Institute may terminate the services of contractor under this agreement.

Institute may also terminate the contractor's services hereunder:

- a. if the firm is adjudged a bankrupt or
- b. if the firm make a general assignment for the benefit of their creditors or
- c. if a receiver is appointed on account of their insolvency or
- d. they disregard law, ordinances, rules, regulations or orders of any public authority having jurisdiction on the works.

The termination shall be without prejudice to all rights, liabilities and remedies that have arisen or accrued till date of such termination or that may arise on account of such termination and Institute may get the project completed by whatever method they may deem expedient. In such case, the Contractor shall not be entitled to receive any further

payment, if due, until the loss damage or expense incurred by Institute due to breach of this agreement by Contractor have been settled by them.

**3. Sub-letting / Sub-Contracting of professional services**

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

**4. 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.

**5. 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.

**6. 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 Institute or if the Engineer in Charge or Institute 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 Chairperson ICDC 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 Chairperson ICDC. The constitution of Dispute Redressal Committee (DRC) shall be as constituted by Director IPR. 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 format 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 Institute for Plasma Research, Bhat, Gandhinagar, and Gujarat- 382428.

7. It is specifically agreed that the Contractor shall continue (if Institute desires) to render its services provided herein with all due diligence, professional skill and tact notwithstanding that any matter, question or dispute has been referred to arbitration.

8. Gandhinagar Courts alone shall have the exclusive jurisdiction.

**9. 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 **12 Months** from the date of receipt of work order excluding mobilization period of 15 days.

**10. Compensation of Delay:**

If the Contractor fails to maintain the required progress as per the time period mentioned to complete the work on or before the contract or justified extended date of completion, he shall, without prejudice to any other right or remedy available on account of such breach, pay as agreed compensation the amount calculated at the rates stipulated below as the authority (Chairperson ICDC) (whose decision in writing shall be final and binding) may decide on the amount for the stage of the work for every completed day/week/ month (as applicable) that the progress remains below that specified in the Time Schedule as provided in Technical Bid or that the work remains incomplete.

This will also apply to items or group of items for which a separate period of completion has been specified.

Compensation for delay of work @ 1.0 % per month of delay to be computed on per day basis. Provided always that the total amount of compensation for delay to be paid under this Condition shall not exceed 10% of the Tendered Value of work.

In case no compensation has been decided by the Authority, 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 Chairperson ICDC 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, 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 liable on account of contractor, then the contractor shall be liable to pay compensation for such delay.

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. In case, the contractor does not achieve a particular milestone mentioned in time schedule, or the re-scheduled milestone(s), the fees corresponding to that stage of payment 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), stage of payment mentioned against each milestone missed subsequently also shall be withheld. However, no interest, whatsoever, shall be payable on such withheld amount.

## **11. 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.

## **12. 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 Chairperson, Infrastructure and Campus development committee (ICDC) through Engineer in charge. Institute shall release payment within 15 days after submission of running bill after deduction if any.

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.

#### **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 Chairperson, Infrastructure and Campus development committee (ICDC) through Engineer in charge. Institute shall release payment of final bill within one month after submission of final bill.

#### **13. Covid-19 protocol and guidelines :**

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

#### **14. 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 in-charge 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.

## (IX) Schedule of Payment

The payment shall be released in stages as mentioned below:

| Sr. No | Description of Stage  | Percentage of the total quoted amount in Price bid |
|--------|---|--|
| 1      | Upon submission of Detailed Design Drawings Building including all utility services to IPR.                 | 2%   |
| 2      | Upon submission of all statutory permissions for Construction to IPR.                                       | 1 %  |
| 3      | Upon completion of Foundations and works up to Plinth at site.  | 25%  |
| 4      | Upon completion of Superstructure Civil & Structural work and finishing works in all respect at site.       | 25%  |
| 5      | Upon completion of all Internal and External Utility services at site.                                      | 25 %   |
| 6      | Upon submission of all Statutory Permission for Building Use to IPR.  | 2%   |
| 7      | Upon Handing over of facility for use and submission of all the documents related to the project to IPR     | 10%  |
| 8      | Upon completion of successful Maintenance of the building and all utility services for 1 <sup>st</sup> year | 5%   |
| 9      | Upon completion of successful Maintenance of the building and all utility services for 2 <sup>nd</sup> year | 5%   |

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 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.

## **(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 12 Months from the date of issue of Work Order to the Contractor.

| <b>Sr. No</b> | <b>Description of Stage</b>  | <b>Cumulative Time period in Months from the date of issue of Work Order</b> |
|---------------|--|--|
| 1             | Submission of Detailed Design Drawings Building including all utility services to IPR.   | 1 (One) Month  |
| 2             | Submission of all statutory permissions for Construction to IPR.   | 2 (Two) Months   |
| 3             | Completion of Foundations and works up to Plinth at site.  | 6 ( Six ) Months   |
| 4             | Completion of Superstructure Civil & Structural work and finishing works in all respect at site.   | 9 (Nine) Months  |
| 5             | Completion of all Internal and External Utility services at site.  | 11 (Eleven) Months   |
| 6             | Submission of all Statutory Permission for Building Use to IPR.  | 12 (Twelve) Months   |
| 7             | Handing over of facility for use and submission of all the documents related to the project to IPR   | 12 (Twelve) Months   |
|               | <b>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)</b> | <b>12 (Twelve) Months</b>  |

**AFTER COMPLETION OF ENTIRE WORKS FROM THE DATE OF HANDING OVER  
OF THE BUILDING AND ALL UTILITY SERVICES TO IPR**

|   |  |   |
|---|--|---|
| 1 | Defect Liability Period  | 12 Months (One year) from the date of handing over of the Building and all Utility services to IPR  |
| 2 | Comprehensive Maintenance of the building and all Utility services | 24 Months (Two years) from the date of handing over of the Building and all Utility services to IPR |

## **Formats to be scanned and uploaded by the Bidders.**

### **LETTER OF TRANSMITTAL**

**From:**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

To  
Chairperson ICDC ,  
Institute for Plasma Research,  
Bhat,  
Gandhinagar – 382428

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

**Subject: Construction of Shed Building at FCIPT campus** of IPR, GIDC, Sector -25, Gandhinagar, 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/09/2021**

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.

5. I/We submit the following documents/certificates in support of our Eligibility for having successfully completed the following works:

| Sr.No | Name of work | Certified by/from |
|-------|--------------|-------------------|
|       |              |                   |
|       |              |                   |
|       |              |                   |
|       |              |                   |
|       |              |                   |
|       |              |                   |

It is certified that the information given in the enclosed eligibility bid are correct. It is also certified that I / We shall be liable to be debarred, disqualified / cancellation of enlistment in case any information furnished by me / us is found to be incorrect.

Enclosures.

Seal of applicant

Date of submission:--

Signature(s) of Applicant(s)

## **Bid Security Declaration Form**

Date: \_\_\_\_\_ Tender No. \_\_\_\_\_

To (insert complete name and address of the purchaser)

I/We. The undersigned, declare that:

I/We understand that, according to your conditions, bids must be supported by a Bid Securing Declaration.

I/We accept that I/We may be disqualified from bidding for any contract with you for a period of one year from the date of notification if I am /We are in a breach of any obligation under the bid conditions, because I/We

a) have withdrawn/modified/amended, impairs or derogates from the tender, my/our Bid during the period of bid validity specified in the form of Bid; or

b) having been notified of the acceptance of our Bid by the purchaser during the period of bid validity (i) fail or reuse to execute the contract, if required, or (ii) fail or refuse to furnish the Performance Security, in accordance with the Instructions to Bidders.

I/We understand this Bid Securing Declaration shall cease to be valid if I am/we are not the successful Bidder, upon the earlier of (i) the receipt of your notification of the name of the successful Bidder; or (ii) thirty days after the expiration of the validity of my/our Bid.

Signed: (insert signature of person whose name and capacity are shown)

in the capacity of (insert legal capacity of person signing the Bid Securing Declaration)

Name: (insert complete name of person signing the Bid Securing Declaration)

Duly authorized to sign the bid for an on behalf of (insert complete name of Bidder)

Dated on \_\_\_\_\_ day of \_\_\_\_\_ (insert date of signing)

Corporate Seal (where appropriate)



**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.

| Particulars  | Financial Year |         |         |         |         |
|--|----------------|---------|---------|---------|---------|
|  | 2015-16        | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
| 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.   |         |         |         |       |
| l) 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 No | DETAIL  | INFORMATION  |
|-------|---|--|
| 1     | Name of work/Project & Location.  |  |
| 2     | Agreement No  |  |
| 3     | Estimated Cost  |  |
| 4     | Tendered Cost   |  |
| 5     | Date of start   |  |
| 6     | Date of Completion<br><br>(i)Stipulated date of completion<br><br>(ii)Actual date of completion |  |
| 7     | Amount of compensation levied for delayed completion, if any.                                   |  |
| 8     | <b>Overall performance of the consultants</b>   | <b>Excellent / Very Good / Good / Satisfactory/<br/>Average / Fair / Unsatisfactory / Poor</b> |

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)  |                      |
|         | <b>Dept./Organisation&amp; Place of registration,<br/>Registration No.</b>   |                      |
|         |  |                      |
|         |  |                      |
| 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 reasons for abandonment.                          |                      |
| 13      | Has the applicant, or any constituent partner in case of partnership firm, ever been debarred / black listed for tendering in any organisation at any time? If so give details.  |                      |

|    |  |  |
|----|--|--|
| 14 | Has the applicant or any constituent partner in case of partnership firm, ever been convicted by a court of law?<br>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) | Remarks |
|---------|------|---------------|-------------|---|---------------------------------|-----------------------------|--|---------|
|         |      |               |             |   |                                 |                             |  |         |
|         |      |               |             |   |                                 |                             |  |         |
|         |      |               |             |   |                                 |                             |  |         |
|         |      |               |             |   |                                 |                             |  |         |
|         |      |               |             |   |                                 |                             |  |         |
|         |      |               |             |   |                                 |                             |  |         |
|         |      |               |             |   |                                 |                             |  |         |
|         |      |               |             |   |                                 |                             |  |         |
|         |      |               |             |   |                                 |                             |  |         |
|         |      |               |             |   |                                 |                             |  |         |
|         |      |               |             |   |                                 |                             |  |         |
|         |      |               |             |   |                                 |                             |  |         |
|         |      |               |             |   |                                 |                             |  |         |
|         |      |               |             |   |                                 |                             |  |         |
|         |      |               |             |   |                                 |                             |  |         |
|         |      |               |             |   |                                 |                             |  |         |

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 | Condition | Ownership status |        |                 |                      | Current Location | How many Proposed for the Project | Remarks |
|--------|--|-----|-------------------------|-----|-----------|------------------|--------|-----------------|----------------------|------------------|-----------------------------------|---------|
|        |  |     |                         |     |           | Presently owned  | Leased | To be purchased | Proposed to be hired |                  |                                   |         |
| 1      | 2  | 3   | 4                       | 5   | 6         | 7                | 8      | 9               | 10                   | 11               | 12                                | 13      |
| 1      | <b><u>Earth moving equipment</u></b><br>Excavators( various sizes)   |     |                         |     |           |                  |        |                 |                      |                  |                                   |         |
| 2      | <b><u>Equipment for hoisting</u></b><br>1. Tower crane<br>2. Builders hoist<br>3. Construction Lift<br>4. Front End Loader   |     |                         |     |           |                  |        |                 |                      |                  |                                   |         |
| 3      | <b><u>Equipment for concrete work</u></b><br>1 Concrete batching plant<br>2. Concrete pump<br>3. Concrete transit mixer<br>4. Concrete mixer (diesel)<br>5. Concrete mixer (elect.)<br>6. Needle vibrator (elect.)<br>7. Needle vibrator (petrol)<br>8. Needle vibrator (elect/petrol)<br>9. Curing pumps (various capacities)<br>10. Water tanker/sprinkler<br>11. Concrete Breaker |     |                         |     |           |                  |        |                 |                      |                  |                                   |         |



|   |   |  |  |  |  |  |  |  |  |  |  |
|---|---|--|--|--|--|--|--|--|--|--|--|
| 4 | <b><u>Equipment for building work</u></b> <ol style="list-style-type: none"> <li>1. Block making machine</li> <li>2. Bar bending machine</li> <li>3. Bar cutting machine</li> <li>4. Wood thickness planers</li> <li>5. Drilling machine</li> <li>6. Circular saw machine</li> <li>7. Welding generators</li> <li>8. Welding transformers</li> <li>9. Welding testing equipments.</li> <li>10. Welding Machines</li> <li>11. Soil Compactor</li> <li>12. M.S.pipes</li> <li>13. Steel shuttering</li> <li>14. Steel scaffolding</li> <li>15. Grinding/Polishing machines</li> <li>16. Surveying Equipment</li> <li>17. Generator</li> <li>18. Plate Compactor</li> <li>19. H frames / MS props support</li> </ol> |  |  |  |  |  |  |  |  |  |  |
| 5 | <b><u>Testing Equipments</u></b> <ol style="list-style-type: none"> <li>1. Cube Testing</li> <li>2. Sieve analysis</li> <li>3. Ultrasonic test</li> <li>4. Silt test</li> <li>5. Micron gauger</li> <li>6. Moisture Metre</li> <li>7. Any other</li> </ol>  |  |  |  |  |  |  |  |  |  |  |
| 6 | <b><u>Equipment for road work</u></b> <ol style="list-style-type: none"> <li>1. Road rollers</li> <li>2. Bitumen paver finishers</li> <li>3. Hot mix plant / Wet mix Plant</li> <li>4. Spreaders</li> <li>5. Earth rammers</li> <li>6. Vibratory road rollers</li> </ol>  |  |  |  |  |  |  |  |  |  |  |
| 7 | <b><u>Equipment for transportation</u></b> <ol style="list-style-type: none"> <li>1. Tippers</li> <li>2. Trucks</li> <li>3. Water tankers</li> <li>4. Dumper</li> </ol>   |  |  |  |  |  |  |  |  |  |  |

|    |   |  |  |  |  |  |  |  |  |  |  |  |
|----|---|--|--|--|--|--|--|--|--|--|--|--|
| 8  | <b>Pneumatic equipment</b><br>1.Air compressors (diesel)<br>2. Air Compressors<br>(Elect) |  |  |  |  |  |  |  |  |  |  |  |
| 9  | <b>Dewatering equipment</b><br>1.Pump (diesel)<br>2.Pump (electric)                       |  |  |  |  |  |  |  |  |  |  |  |
| 10 | <b>Power equipment</b><br>1.Diesel generators   |  |  |  |  |  |  |  |  |  |  |  |
| 11 | <b>Equipment for Piling works</b><br>1. Hydraulic piling rig<br>2. Piling rigs            |  |  |  |  |  |  |  |  |  |  |  |
| 12 | <b>Any other plants/equipments</b>  |  |  |  |  |  |  |  |  |  |  |  |

**FORM 'H'**  
**Curriculum Vitae of KEY PERSONNEL**

| SI NO | Detail   |  |
|-------|--|--|
| 1     | Name   |  |
| 2     | Date and place of birth:   |  |
| 3     | Nationality:   |  |
| 4     | Address (phone/fax/e-mail):  |  |
| 5     | Education:<br>(i) Institutions:<br>(ii) From (month/year)<br>(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<br>Date: From - To<br>(i) Brief description                    |  |

## FORM “I”

### FORM OF BANKER’S CERTIFICATE FROM A SCHEDULED BANK

This is to certify that to the best of our knowledge and information that M/s. \_\_\_\_\_  
(with address ) a customer of our bank are / is respectable and can be treated as good for any engagement up to  
a limit of Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_).

This certificate is issued without any guarantee or responsibility 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.

**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 Party : .....

2. Address of the Party :- .....

.....

.....

City:.....Pin Code:.....

E-mail Id:.....

Permanent Account Number:.....

3. Particulars of Bank :

|   |         |             |             |
|---|---------|-------------|-------------|
| Bank Name   |         | Branch Name |             |
| Branch Place  |         | Branch City |             |
| Pin Code  |         | Branch Code |             |
| MICR NO   |         |             |             |
| (9 Digits code number appearing on the MICR Band of the Cheque supplied by the Bank. Please attach Xerox copy of a cheque of your bank for ensuring accuracy of the bank name, branch name and code number) |         |             |             |
| Account Type  | Savings | Current     | Cash Credit |
| Account Number(as appearing in the Cheque Book)   |         |             |             |
| RTGS / IFSC Code  |         |             |             |

4. Date from which the mandate should be effective:

I hereby declare that the particulars given above are correct and complete. If any transaction is delayed or not effected for reasons of incomplete or incorrect information, **IPR** shall not hold responsible. I also undertake to advise any change in the particulars of my account to facilitate updation of records for purpose credit of amount through RTGS /NEFT/ECS

Place :

Date : \_\_\_\_\_ Signature of the Party / Authorized Signatory

Certified that particulars furnished above are correct as per our Records

Bank's Stamp :

Date : \_\_\_\_\_ (Signature of the Authorized Official from the Bank)

**N.B : RTGS Charges, if any, will be borne by the Party**

## Integrity Pact.

---

To,

\_\_\_\_\_

\_\_\_\_\_

Subject : NIT No. \_\_\_\_\_ for the work \_\_\_\_\_

Dear Sir,

It is hereby declared that Institute For Plasma Research is committed to follow the principle of transparency, equity and competitiveness in public procurement.

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 form 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,

Chairperson I-CDC, IPR

## Integrity Pact

To,  
Chairperson I-CDC, 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 this .....day of .....20.....

**BETWEEN**

Director,IPR represented through Chairperson-ICDC 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 .....(Hereinafter referred to  
as the

(Details of duly authorized signatory)

**"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. ....)  
(hereinafter referred to as "Tender/Bid") and intends to award, under laid down organizational  
procedure, contract for

.....  
(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.

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

**Article 1: Commitment of the Principal/Owner**

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



(a) No employee of the Principal/Owner, personally or through any of his/her family members, will in connection with the Tender, or the execution of the Contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.

(b) The Principal/Owner will, during the Tender process, treat all Bidder(s) with equity and reason. The Principal/Owner will, in particular, before and during the Tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential / additional information through which the Bidder(s) could obtain an advantage in relation to the Tender process or the Contract execution.

(c) The Principal/Owner shall endeavour to exclude from the Tender process any person, whose conduct in the past has been of biased nature.

(2) If the Principal/Owner obtains information on the conduct of any of its employees which is a criminal offence under the Indian Penal code (IPC)/Prevention of Corruption Act, 1988 (PC Act) or is in violation of the principles herein mentioned or if there be a substantive suspicion in this regard, the Principal/Owner will inform the Chief Vigilance Officer and in addition can also initiate disciplinary actions as per its internal laid down policies and procedures.

## **Article 2: Commitment of the Bidder(s)/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(s) will 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 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 intentions.

(5) It is agreed term and condition that any dispute or difference arising between the parties with regard to the terms of this Integrity Agreement / Pact, any action taken by the Owner/Principal in accordance with this Integrity Agreement/ Pact or interpretation thereof shall not be subject to arbitration.

#### **Article 8- LEGAL AND PRIOR RIGHTS**

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

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

.....  
(For and on behalf of Principal/Owner)

.....  
(For and on behalf of Bidder/)

WITNESSES:

1. ....  
(Signature, name and address)

2. ....  
(Signature, name and address)

Place:

Dated:

\_\_\_\_\_

## **DECLARATION BY THE BIDDER**

### **CERTIFICATE**

I \_\_\_\_\_, working as \_\_\_\_\_ in this organization and authorized to issue this certificate and certify that:

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.

Name: ..... Dated: .....

Designation: .....

[Please Affix Rubber Stamp]

(To be printed in letter head)

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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/09/2021**. 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**

**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)

Tender No: **E-Tender Notice No.: IPR/TN/CIVIL-PR/09/2021.**

Tender Title: **Construction of Shed Building at FCIPT campus** of IPR, GIDC, Sector -25, Gandhinagar, 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)

\_\_\_\_\_  
(Name and designation)

Duly authorized to sign Bid for and on behalf of

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

## 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   |
|---------|---|---|
| 1       | Structural Steel /Rolled Steel sections-beams, ISMB/ISLB/ NPB beams/Plates/ channels, tee, flats, angles, bars(round, square, hexagonal) Structural Hollow steel sections (Square & Rectangular) Structural tubular sections, | <p>IS- 2062, IS 4923, IS 1161, IS 12778 etc and respective Design codes as applicable.</p> <p>Test Certificates should be submitted after Procuring of material at site.</p> <p><b>Note:</b> 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.</p>                             |
| 2       | Customised Pre-Engineered Sections.   | <p>IS- 2062, IS 4923, IS 1161, IS 12778 etc or<br/>Respective Design codes as applicable/<br/>As per Manufacturer according to Design,</p> <p>Test Certificates should be submitted after Procuring of material at site.</p> <p><b>Note:</b> 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,</p> |



|    |  |  |
|----|--|--|
|    |  | IS 822, and IS 833.  |
| 3  | Motorised Pre colour coated GI / Galvalume Rolling Shutter | As per Manufacturer's Specifications.  |
| 4  | Pre-coated steel roofing/ walling sheets 550 Mpa           | As per Manufacturer's Specifications.<br>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:<br><br>(a) Mild steel and medium tensile bars conforming to IS:432 (Part 1)<br>(b) High strength deformed steel bars conforming to IS:1786<br>(c) Hard drawn steel wire fabric conforming to IS:1566<br>(d) Structural steel conforming to Grade A of IS:2062<br>(e) Thermo-mechanically treated bars (TMT Bars).<br>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.<br>Test Certificates should be submitted after Procuring of material at site. |
| 25 | Paint                                  | IS 15489/Test Certificates  |
| 26 | Polish                                 | As per Manufacturer's Specifications.<br>Test Certificates should be submitted after Procuring of material at site. |
| 27 | Door Window & Furniture Hardware       | As per Manufacturer's Specifications.<br>Test Certificates should be submitted after Procuring of material at site. |
| 28 | Adhesives                              | As per Manufacturer's Specifications.<br>Test Certificates should be submitted after Procuring of material at site. |
| 29 | Floor spring                           | IS 6315 /Test Certificates  |
| 30 | Door closer                            | IS 3564<br>Test Certificates should be submitted after Procuring of material at site.                               |
| 31 | Aluminum sections                      | As per Manufacturer's Specifications.<br>Test Certificates should be submitted after Procuring of material at site. |
| 32 | Paver Blocks                           | As per Manufacturer's Specifications.<br>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                    |
| 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, /<br>As per Manufacturer's Specifications. |
| 21. | Cold but not formed welded & seamless carbon steel structural tubing                                  | Respective Standard Code, /<br>As per Manufacturer's Specifications. |
| 22. | Hot formed welded & seamless high strength low alloy tubing   | Respective Standard Code, /<br>As per Manufacturer's Specifications. |
| 23. | Hot rolled structural steel hollow section  | Respective Standard Code, /<br>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   |

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| 30. | Specification for Synthetic Resin Adhesives for Plywood  | IS:848    |
| 31. | Code of Practice for Design Loads  | IS:875    |
| 32. | Equivalent Metric Units for Scales Dimension and Quantities in General Construction Work           | IS:965    |
| 33. | Code of Basic Requirements for Water Supply Drainage and Sanitation                                | IS:1172   |
| 34. | Recommended Practice for Radiographic Examination of Fusion Welded Butt Joint in Steel Plates      | IS:1182   |
| 35. | Sand for Plaster Specifications  | IS:1542   |
| 36. | Code of Practice for Design and Construction of flues and Chimneys for Domestic heating Appliances | IS: 1649  |
| 37. | Blockboards Specifications   | IS: 1659  |
| 38. | Code of Practice for Application of Cement and Cement Lime Plaster Finishes                        | IS: 1661  |
| 39. | Specification for Self Closing Taps for Water Supply Purposes                                      | IS: 1711  |
| 40. | Steel Plates, Sheets, Strips and Flats For Structural And General Engineering Purposes – Dimension | IS: 1730  |
| 41. | Steel bars, Round and Square For Structural And General Engineering Purposes – Dimension           | IS: 1732  |
| 42. | Code of Practice for Building Drainage   | IS: 1742  |
| 43. | Method of Load Test on Soils   | IS: 1888  |
| 44. | Code of Practice for Subsurface Investigation for Foundation                                       | IS: 1892  |
| 45. | Criteria For Earthquake Resistance Design of Structures  | IS: 1893  |
| 46. | Specification for Aluminium Windows for Industrial building  | IS: 1949  |
| 47. | Specification for Sand For Masonry Mortars   | IS: 2116  |
| 48. | Method For Standard Penetration Test For Soils   | IS: 2131  |
| 49. | Code Of Practice For Thin Walled Tube Sampling Of Soils  | IS: 2132  |
| 50. | Brick Works – Code Of Practice   | IS: 2212  |
| 51. | Methods of Sampling of Aggregates For Concrete   | IS: 2430  |
| 52. | Methods of test for permeability of cement mortar and concrete                                     | IS: 3085  |
| 53. | Method of Measurement of Building Works  | SP :27    |
| 54. | Concrete pipes - Methods of test   | IS: 3597  |
| 55. | Methods of testing fusion welded joints and weld metal in steel                                    | IS: 3600  |
| 56. | Specification of sand stone (slab and tiles)   | IS :3622  |
| 57. | Specification for fly ash for use as pozzolana and admixture                                       | IS :3812  |
| 58. | Stacking and storage of construction material at site  | IS :4082  |
| 59. | Code of Practice for laying of epoxy resin floor toppings  | IS :4631  |
| 60. | Specification for concrete batching and mixing plant   | IS : 4925 |
| 61. | Ready Mixed Concrete – Code of Practice  | IS : 4926 |
| 62. | Safety Code for Erection of Structural Steelwork   | IS : 7205 |

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| 63. | Safety Code For Handling And Storage Of Building Materials                              | IS : 7969     |
| 64. | Method of test for determining setting time of concrete by penetration resistance       | IS : 8142     |
| 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 enclosures of electrical equipment.   | IS-12063              |
| 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 conductors & apparatus terminals. | IS-11353              |
| 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) : Electrical Installations.       | IS : 1646             |

## 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 Volts.                | IS:5039                      |
| 11. | Specification for Switchgear & Control Assemblies.                        | IS: 8623: (Part I to 3)      |
|     | <b>WIRES AND CABLES</b>   |                              |
| 12. | PVC insulated cables for working voltages up to and including 1100 Volts. | IS-694                       |

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|-----|--|---------------------|
| 13. | Code of practice for installation and maintenance of power cables up to and including 33 kV rating   | IS-1255             |
| 14. | PVC insulated (heavy duty) electric cables (part 1) for working voltage up to and including 1100 V.- Part (2) for working voltage from 3.3 kV up to and including 22 kV. | IS-1554 (P1 and P2) |
| 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 of cables.   | IS-3975             |
| 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 cables for working voltage up to and including 1100 volts.  | IS-7098             |
| 22. | Cross-linked polyethylene insulated PVC sheathed cables for working voltage from 3.3kV up to and including 33 kV.  | IS-7098             |
| 23. | Conductors for insulated electrical cables and flexible cords.   | IS-8130             |
| 24. | Specification for drums for electric cables.   | IS-10418            |
| 25. | Code of Practice for Fire Safety in Cable Runs   | IS-12459            |
| 26. | <b>GALVANIZING</b>   |                     |
| 27. | Zinc Ingot   | IS-209 -            |
| 28. | Recommended Practice for Hot-Dip galvanizing on iron and steel.  | IS-2629 -           |
| 29. | Methods for testing uniformity of coating of zinc coated articles.   | IS-2633 -           |
| 30. | Hot Rolled medium and high Tensile Strength Steel.   | IS-2062             |
| 31. | General Construction in Steel – Code of Practice.  | IS-800              |
|     |  |                     |
|     | <b>PAINTING</b>  |                     |
| 32. | Code of practice for phosphating of iron and steel.  | IS-6005             |
| 33. | Colours for Ready Mixed Paints and Enamels.  | IS - 5              |
|     |  |                     |
|     | <b>FIRE EXTINGUISHERS</b>  |                     |
| 34. | Code of practice for fire extinguishing installations and equipment on premises  | IS:5306 -           |
|     |  |                     |
|     | <b>LIGHTING FIXTURES AND ACCESSORIES</b>   |                     |
| 35. | General and safety requirements for electric lighting fittings.  | IS:1913             |
| 36. | Water proof electric lighting fittings.  | IS:3528             |
| 37. | Dust proof electric lighting fittings.   | IS:4012             |
| 38. | Dust tight proof electric lighting fittings.   | IS:4013             |
| 39. | Industrial lighting fittings with metal reflectors.  | IS:10322            |
| 40. | Industrial lighting fittings with plastic reflectors.  | IS:10322            |
| 41. | (non flame proof type).  | IS:2206             |

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| 42. | Specification for flood light.   | IS:10322                                  |
| 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 requirements– Part 1 For switch start circuits                                | IS 1534 (Part 1)                          |
| 54. | Particular requirements for ballasts for fluorescent lamps   | IS 15885                                  |
| 55. | (Part 1 and Part 2) AC supplied electronic ballast for tubular fluorescent lamps – performance requirement                         | IS 13021                                  |
| 56. | Electromagnetic compatibility Part 3 Limits for harmonic current emissions   | IS 14700 (Part 3/Sec2)                    |
| 57. | Limits and methods of measurement of radio disturbance characteristics   | IS 6873 (Part5)                           |
| 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 and Definitions  | IS- 16101:2012                            |
| 62. | Self- Ballasted LED Lamps for General Lighting Services Part 1 Safety Requirements   | IS- 16102(Part 1) : 2012                  |
| 63. | Self-Ballasted LED Lamps for General Lighting Services Part 2 Performance Requirements   | IS- 16102(Part 2) : 2012                  |
| 64. | Led Modules for General Lighting Part 1Safety Requirements   | IS- 16103(Part 1) : 2012                  |
| 65. | Led Modules for General Lighting Part 2 Performance Requirements   | IS- 16103(Part 2) : 2012                  |
| 66. | Safety of Lamp Control Gear Part 2 Particular Requirements Section 13 d.c. or a.c. Supplied Electronic Controlgear for Led Modules | IS- 15885(Part2/Sec13): 2012              |
| 67. | Luminaires Performance Part 1 General Requirements   | IS- 16107(Part 1):2012                    |
| 68. | Luminaires Performance Part 2 Particular Requirements Section 1 LED Luminaire  | IS- 16107-1:2012                          |
|     |  |   |
|     | <b>CONDUITS ACCESSORIES AND JUNCTION BOXES</b>   |   |
| 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                                  |



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| 73.  | Fittings for rigid steel conduits for electrical wiring   | IS:2667          |
| 74.  | Accessories for rigid steel conduits for electrical wiring  | IS:3837          |
| 75.  | Adaptors for flexible steel conduits.   | IS:4649          |
| 76.  | Steel and Cast Iron Boxes   | IS:5133          |
|      |   |                  |
|      | <b>LIGHTING PANELS</b>  |                  |
| 77.  | LV Switchgear and Control gear (Part 1 to 5)  | IS:13947         |
| 78.  | Circuit breakers for over current protection for house hold and similar installations.                          | IS:8828          |
| 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-2)   | IS:9224          |
| 83.  | Wrought aluminium and Al. alloys bars rods tubes and sections for electrical purposes.                          | IS:5082          |
| 84.  | Factory built Assemblies of Switchgear and Control Gear for voltages up to and including 1000V AC and 1200V DC. | IS:8623          |
| 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      |
|      | <b>ELECTRICAL INSTALLATION</b>  |                  |
| 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 work.   | IS:5216          |
| 93.  | Code of practice for electrical wiring installation (system voltage not exceeding 650 Volts.)                   | IS:732           |
| 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 hazardous Areas.  | IS:5571          |
| 98.  | Code of practice for use of structural steel in general building construction.                                  | IS:800           |
| 99.  | Methods of Testing uniformity of coating on zinc coated articles.   | IS:2633          |
| 100. | Code of practice for phosphating iron and steel.  | IS:6005          |
| 101. | Copper  | IS:191: 2007     |
| 102. | Copper Rods and Bars for Electrical Purposes.   | IS:613: 2007     |
| 103. | Method of Chemical Analysis for Copper  | IS 440: 1964     |
|      |   |                  |
|      | <b>LT SWITCHGEAR</b>  |                  |
| 104. | Specification for low voltage switchgear and control gear assemblies  | IS:8623 (Part-I) |

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| 105. | Specification for low voltage switchgear and control gear                  | IS:13947 (Part-I)     |
| 106. |  | Part 1 General Rules. |
| 107. | Specification for low voltage switchgear and control gear                  | IS:13947 (part-2)     |
|      | Part 2 circuit breakers.   |                       |
| 108. | Specification for low voltage switchgear and control gear. Part 3 Switches | IS:13947 (part-3)     |
| 109. | Switch - disconnectors and fuse combination units                          | Disconnectors         |
| 110. | Specification for low voltage switchgear & control gear.                   | IS:13947 (part-4)     |
| 111. | Specification for low voltage switchgear & control gear.                   | IS:13947 (part-5)     |
| 112. | Specification for low voltage switchgear & control gear.                   | IS:13947 (part-6)     |
| 113. | Multiple function switching devices.                                       |                       |
| 114. | Specification for low voltage switchgear & control gear.                   | IS:13947 (part-7)     |
| 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 apparatus terminals           | IS:5578               |
| 123. | Low voltage fuses for voltage not exceeding 1000V AC or 1500V DC Part 1    | IS:13703 (part 1)     |
|      | General Requirements   |                       |
| 124. | Low voltage fuses for voltage not exceeding 1000V AC or 1500V DC           | IS:13703 (part 2)     |
| 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 electrical purposes             | IS:5082               |
| 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. |  |                       |
|      | <b>MISCELLENOUS ITEMS</b>  |                       |
| 133. | For Cable jointing & Termination kits                                      | IS: 13573             |
| 134. | Specification for Copper   | IS: 191: 1980         |
| 135. | Solid Drawn Copper Tubes for General Engineering Purposes                  | IS: 2501:1995         |
| 136. | Code of Practice for Electrical Wiring Installations                       | IS: 732               |

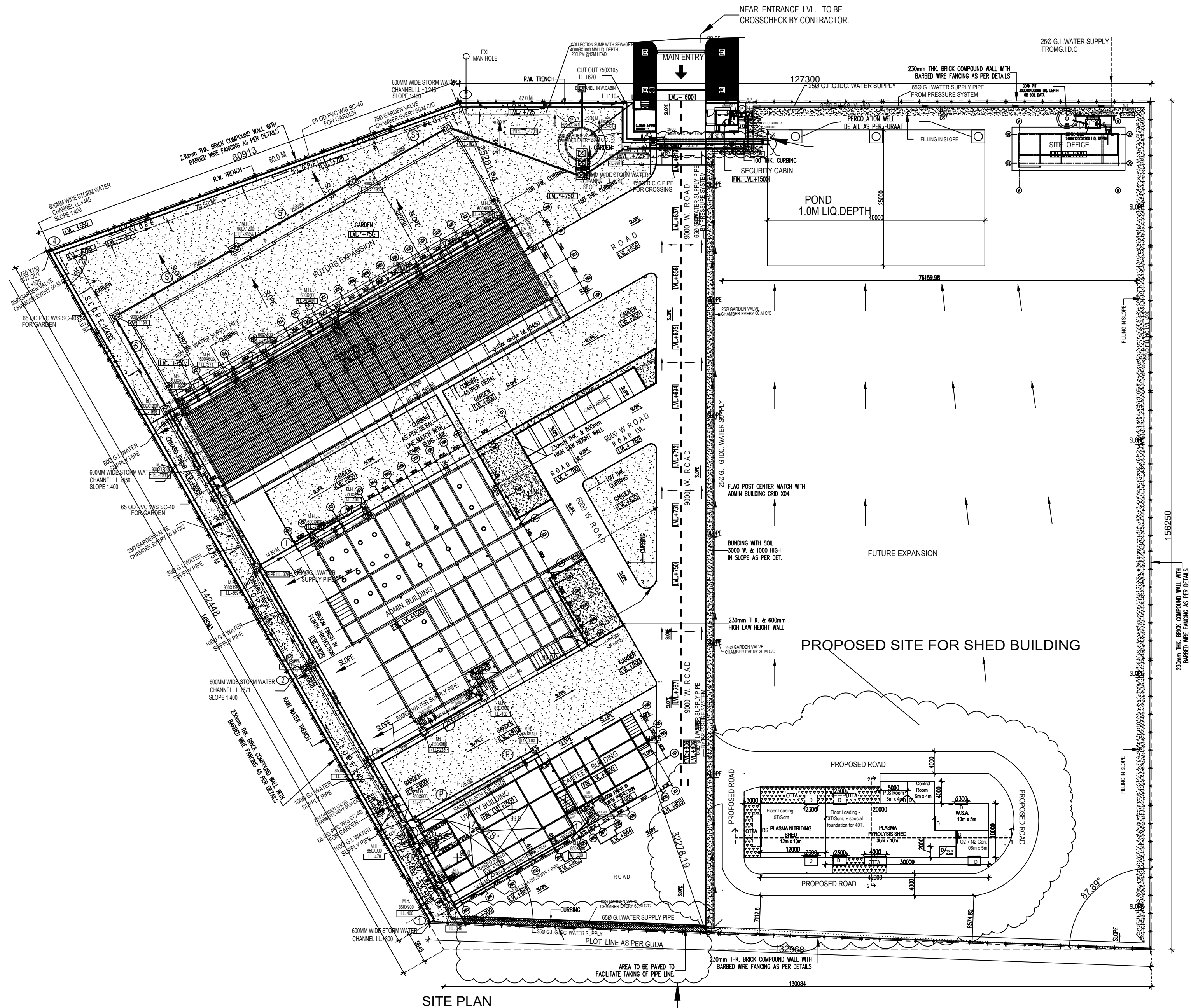
## HVAC works:

|     |   |                                      |
|-----|---|--------------------------------------|
| 1.  | Glossary of terms used in Refrigeration and Air-conditioning.   | 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                             |
| 28. | ▪ CI fittings for Pressure piping   | IS : 1538                            |
| 29. | ▪ Structural Steel.   | IS : 226                             |

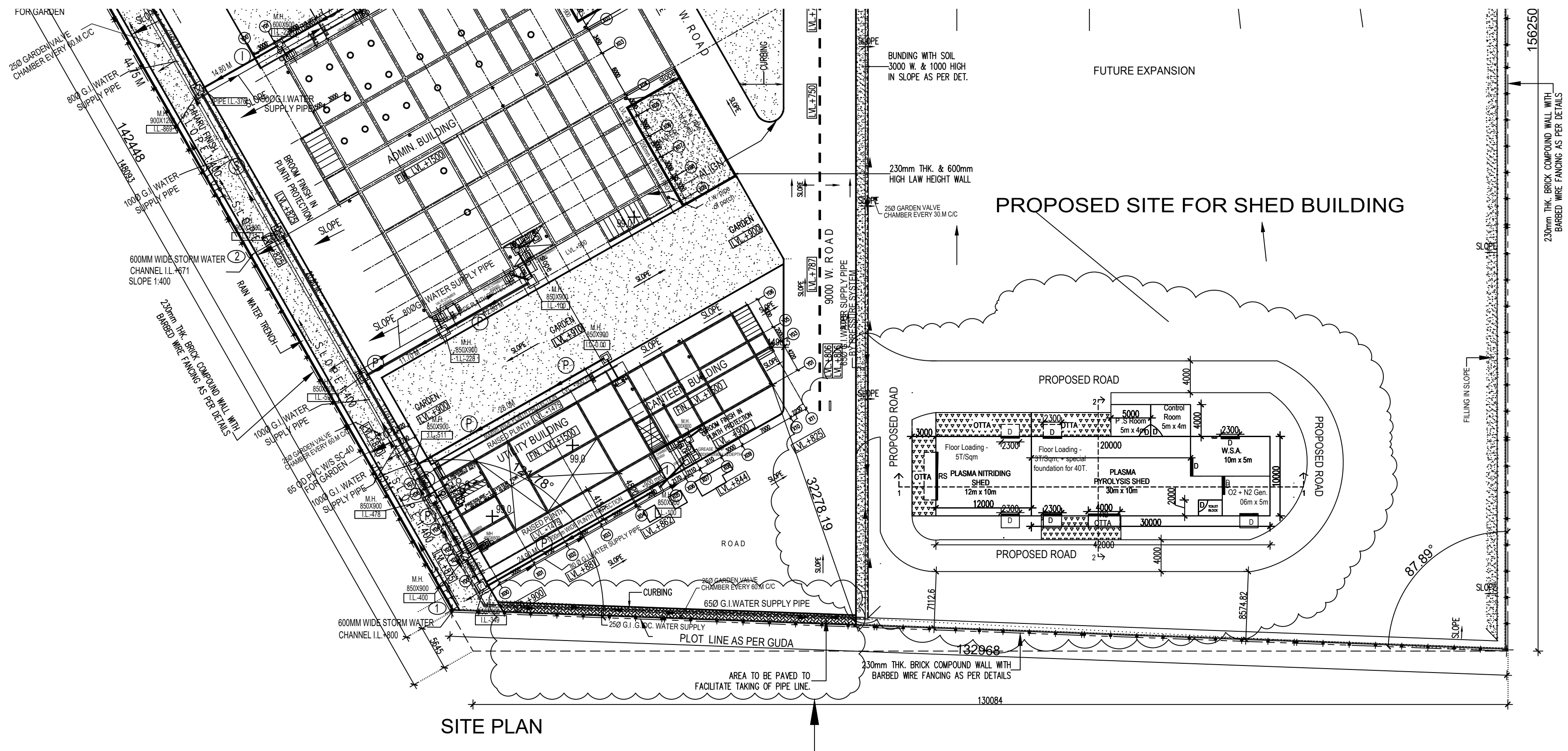
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| 30. | ▪ Gaskets  | IS : 638                        |
| 31. | ▪ Rubber gasket, Teflon gasket for SS piping.  | IS : 628                        |
| 32. | Dimensions for pipe threads for pressure tight joints  | IS : 554 – 1975                 |
| 33. | 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<br>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              |
| 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                |

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|-----|---|-------------------------------------|
| 61. | Code for practice for installation and Testing of electrical wiring.  | IS : 732 –1963 , 1973               |
| 62. | <ul style="list-style-type: none"> <li>▪ PVC insulated electric cable for working up to and including 1100 volts.</li> </ul> PVC insulated (HD) electric cable for working up to 1.1 kV and 11kV volts. | IS : 694 - 1977<br>IS : 1554 : 1981 |
| 63. | Direct acting electrical indicating instruments.  | IS : 1248                           |
| 64. | <ul style="list-style-type: none"> <li>▪ Starters.</li> </ul>   | IS : 1822                           |
| 65. | <ul style="list-style-type: none"> <li>▪ Motor starters for voltage not exceeding 1000 Volts.</li> </ul>  | IS : 8544 - I to IV 1979            |
| 66. | <ul style="list-style-type: none"> <li>▪ HRC fuse and links, up to 650 Volts.</li> </ul>  | IS : 2208 - 1979                    |
| 67. | <ul style="list-style-type: none"> <li>▪ Degree of protection provided by enclosures for low voltage switch gear and control gears.</li> </ul>  | IS : 2147 – 1962                    |
| 68. | <ul style="list-style-type: none"> <li>▪ Code of practice for installation and maintenance of Switchgear.</li> </ul>  | IS : 10118: 1982                    |
| 69. | Earthing.   | IS : 3043 : 1966                    |
| 70. | Methods of measurement of noise emitted by machines.  | IS : 4758 : 1968                    |
| 71. | <ul style="list-style-type: none"> <li>▪ Mechanical vibration – balancing.</li> </ul>   | IS : 14280 : 1995                   |
| 72. | Permissible limits of noise level for rotating electrical machines  | IS : 12065 : 1987                   |

# EXISTING LAYOUT PLAN of FCIPT CAMPUS SHOWING PROPOSED SITE FOR SHED BUILDING



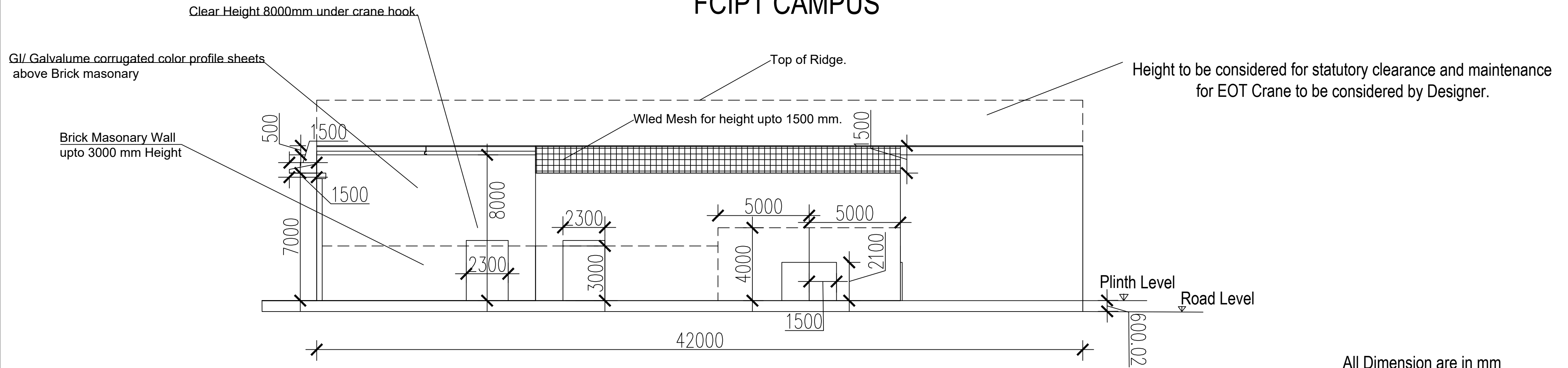
SITE PLAN







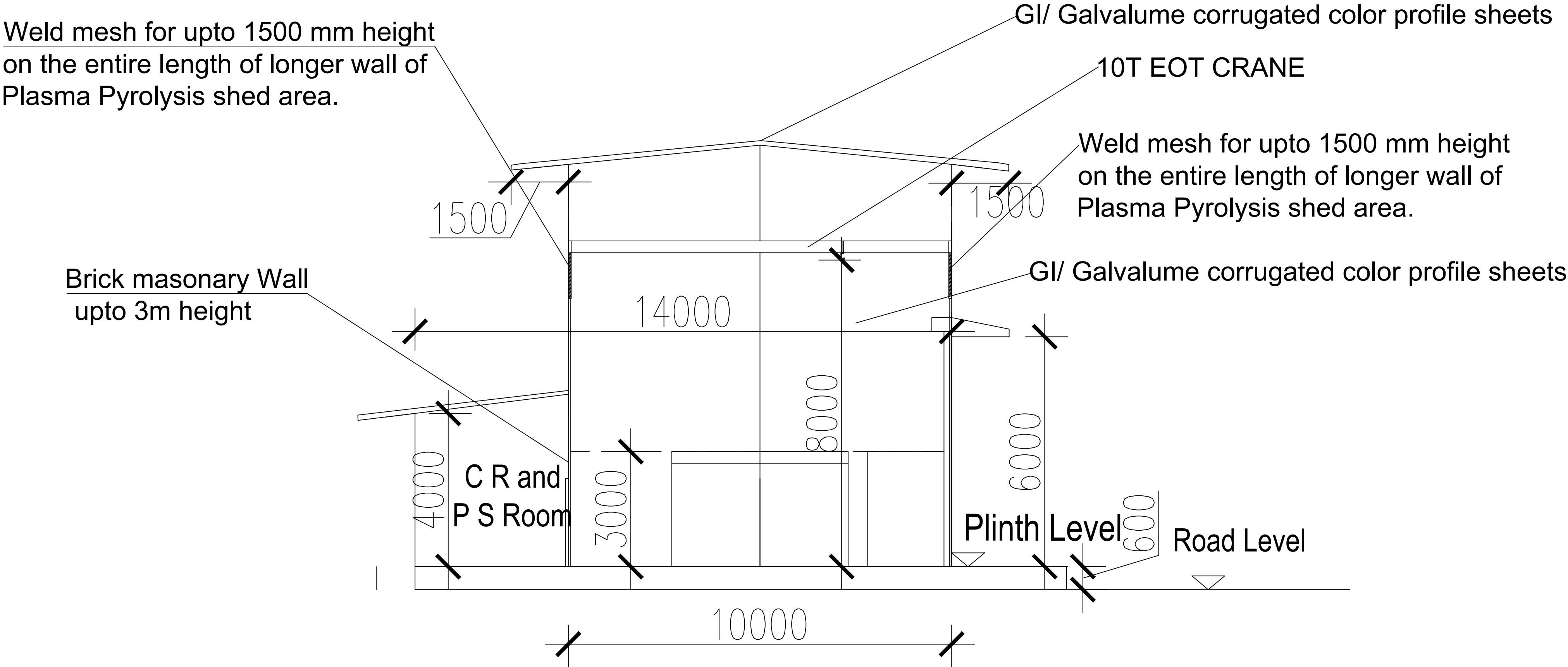
TENTATIVE SKETCH INDICATING SECTION 1-1 OF THE PROPOSED SHED BUILDING AT  
FCIPT CAMPUS



All Dimension are in mm

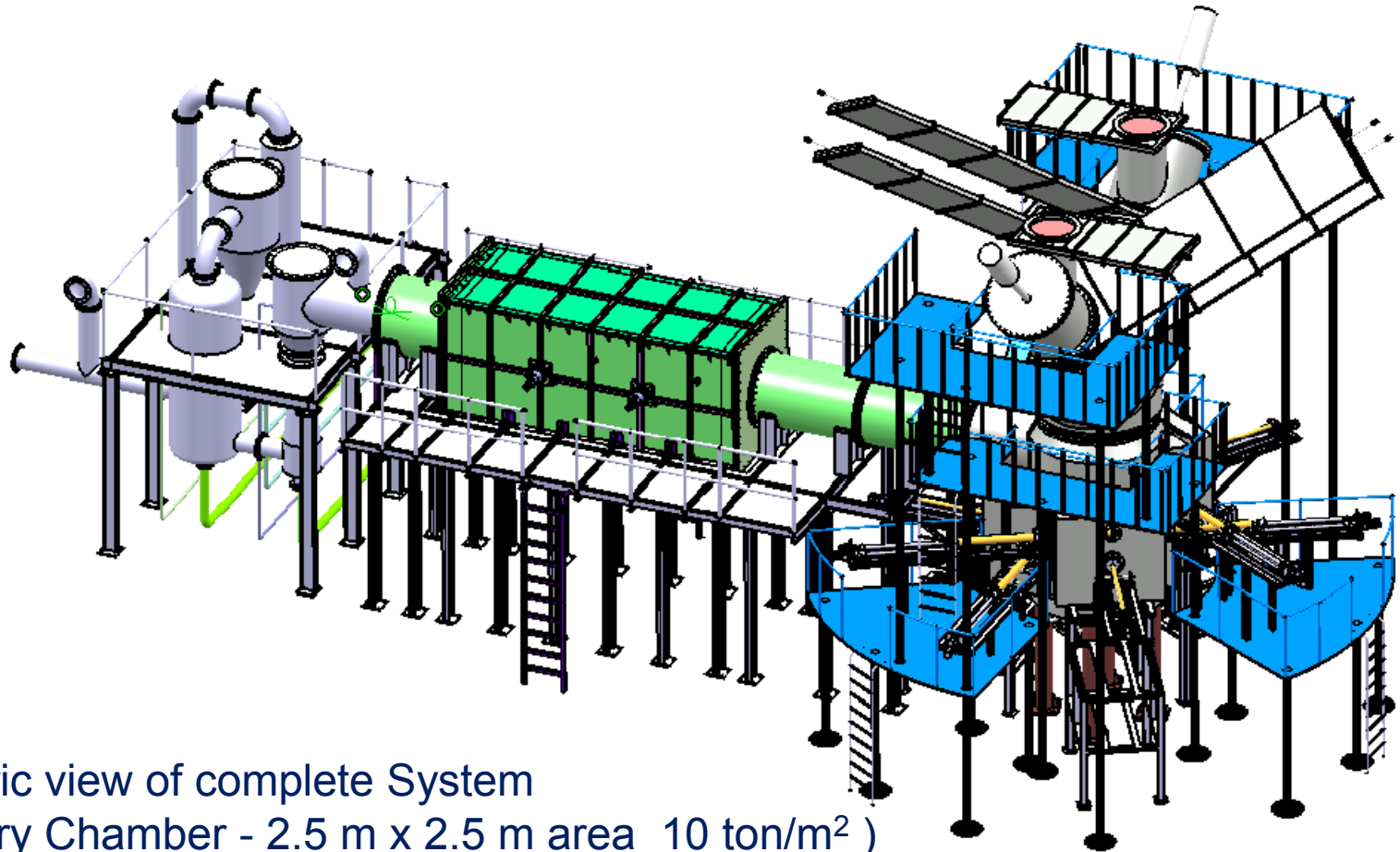
# SECTION 1-1

# TENTATIVE SKETCH INDICATING SECTION 2-2 OF THE PROPOSED SHED BUILDING AT FCIPT CAMPUS



SECTION 2-2

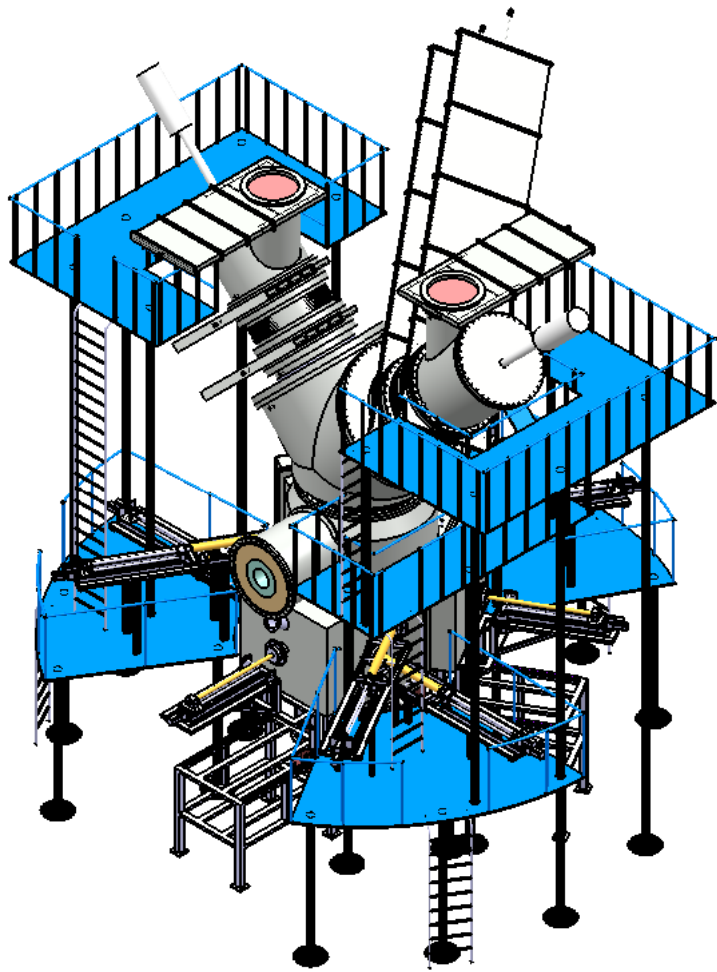
All Dimension are in mm



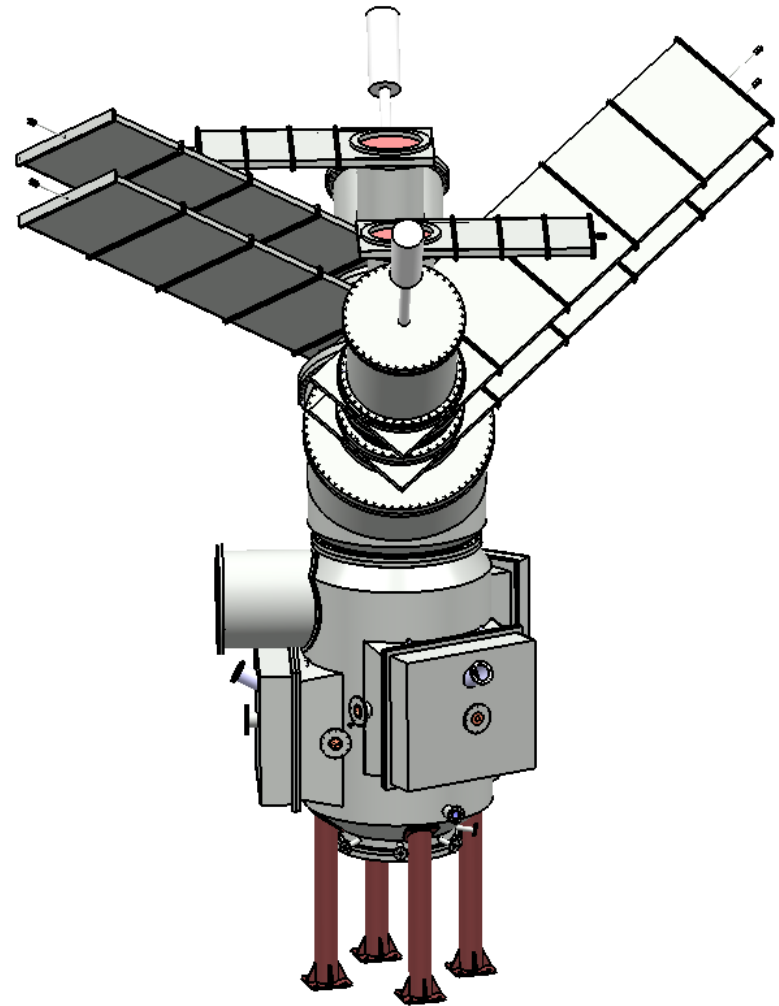
Isometric view of complete System  
( Primary Chamber - 2.5 m x 2.5 m area 10 ton/m<sup>2</sup> )

### Flooring requirements:

- |                            |                                      |
|----------------------------|--------------------------------------|
| 1. For primary chamber     | :10 tonn/sqmtr. (2.5 m x 2.5 m area) |
| 2. For secondary chamber   | :3 tonn/sqmtr.                       |
| 3. For gas cleaning system | :3 tonn/sqmtr.                       |



**Isometric View of Primary chamber  
with Support structure**



**Isometric View of Primary chamber**  
Base area – 2.5 m X 2.5 mtr.  
Weight - 32 Tonn