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

1	एनआईटी न. NIT No.	IPR/TN/CIVIL-PR/05/2021
2	कार्य का नाम Name of work	जीआईडीसी, सेक्टर -25, गांधीनगर, गुजरात में स्थित आईपीआर के एफसीआईपीटी कैंपस में शेड बिल्डिंग के प्रस्तावित निर्माण का डिजाइन, निर्माण और हस्तांतरण, साथ ही डिज़ाइन करना, वैधानिक अनुमति प्राप्त करना, सुविधा के उपयोग हेतु निर्माण करना एवं प्लाज़मा अनुसंधान संस्थान (आईपीआर) को सुपुर्द करना। Design, Build and Transfer of proposed Construction of Shed Building at FCIPT campus of IPR, GIDC, Sector -25, Gandhinagar, Gujarat including Design, obtaining Statutory permissions, Construction (Build) to make facility for use and Transfer to Institute for Plasma Research (IPR).
3	परियोजना की अनुमानित कुल लागत (डिज़ाइन करना, वैधानिक क अनुमति प्राप्त करना, सभी उपयोगी सामग्रियों के साथ निर्माण कार्य एवं दो साल के लिए व्यापक रखरखाव) Estimated Total Cost of Project (Design, Obtaining statutory permissions and Construction works (Build) including all utilities and Comprehensive Maintenance for Two years)	

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4	बयाना राशि (EMD)	संलग्न प्रारूप के अनुसार बोली सुरक्षा घोषणा प्रपत्र के रूप में बयाना राशि केवल बोलीकर्ताओं द्वारा जमा की जानी चाहिए।
		बोली सुरक्षा घोषणा प्रपत्र की स्कैन कॉपी अपलोड करने के बाद ही बोली जमा की जा सकती है और बोली जमा करने की अवधि के भीतर मूल प्रति ई-निविदा अधिकारी के कार्यालय में जमा की जानी चाहिए।
		बोली सुरक्षा घोषणा प्रपत्र के बिना प्राप्त बोलियों को सरसरी तौर पर खारिज कर दिया जाएगा।
	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.
5	कार्य समापन की अवधि	365 days (12 महिने) (इस अवधि में परियोजना के पूरा होने
		तक ठेकेदार द्वारा डिजाइन कार्य, वैधानिक अन्मति प्राप्त करना
		एवं निर्माण कार्य (बिल्ड) व आईपीआर को सुपुर्दगी शामिल है)
	Completion period	365 days (12 Months) (Including Design, obtaining statutory permissions & Construction works (Build) by Contractor till project completion, and Transfer to IPR)
6	निविदा प्रक्रिया श्ल्क	Nil
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	Tender Processing Fee	Nil
7	निष्पादन गारंटी	स्वीकृति पत्र जारी करने और कार्यादेश जारी करने से पहले 15 दिनों के भीतर निविदा मूल्य का 3%।
	Performance Guarantee	3 % of Tendered Value to be submitted within 15 days upon issue of Letter of Acceptance and before placing Work Order

8	सुरक्षा जमा राशि	निविदा मूल्य का 2.5% बिलों से काट लिया जाएगा।
	Security Deposit	2.5% of the Tendered Value shall be deducted from the bills.
9	CPP Portal वेबसाइट https://eprocure.gov.in/eprocure/app पर देखने तथा डाउनलोड करने के लिए निवेदा दस्तावेज़ की उपलब्धता	दि. 17/08/2021 को प्रातः 10:00 से 05/10/2021 को 13:00 बजे तक
	Availability of Tender Documents for view and download on CPP portal website https://eprocure.gov.in/eprocure/app	From 10:00 Hours on 17/08/2021 Up to 13:00 Hours on 05/10/2021.
10	साइट विजिट, यदि हो तो Site Visit, if any	एजेंसियों द्वारा साइट विजिट(यदि हो) -दि. 07/09/2021 को 15:00 बजे तक संपर्क अधिकारी - श्री शैलेन्द्र त्रिवेदी, प्रभारी अधिकारी, etender, प्लाज्मा अनुसंधान संस्थान, इंदिरा पुल के पास, भाट, गांधीनगर-382428. प्राथमिकता से ईमल द्वारा: etender.icdc@ipr.res.in या दूरभाष नंबर: -079-2396 2000, 2396 4009 के माध्यम से Site visit by Agencies (if any) - up to 15:00 Hours on 07/09/2021. Contact officer Mr. Shailendra. Trivedi, officer in-charge, e-tender, Institute for Plasma Research, Near Indira Bridge, Bhat, Gandhinagar -382428. Preferably by email: etender.icdc@ipr.res.in or through Tel No:-079-2396 2000, 2396 4009
11	बोली पूर्व स्पष्टता Pre-bid clarification.	आवेदक CPP portal वेबसाइट https://eprocure.gov.in/eprocure/app पर अपने प्रश्नों को अपलोड करके दि. 10/09/2021 को 15:00 बजे तक निविदा दस्तावेज़ के बारे में स्पष्टीकरण मांग सकता है। The applicant can seek clarifications regarding Tender document up to 15:00 Hours on 10/09/2021 by uploading their queries on CPP portal website https://eprocure.gov.in/eprocure/app

		The clarifications will be uploaded on the same web portal by 15:00 Hours on 22/09/2021. स्पष्टीकरण दि. 22/09/2021 को 15:00 बजे तक उसी वेब पोर्टल पर अपलोड किया जाएगा।
12	निविदाओं के ऑनलाइन जमा करने की आरंभ तारीख और समय Start date and time of online submission of tenders	दि. 23/09/2021 को 13:00 बजे से From 13:00 Hours on 23/09/2021.
13	निविदाओं के ऑनलाइन जमा करने की अंतिम तारीख और समय Last date and time of closing of online submission of tenders	दि. 05/10/2021 को 13:00 बजे तक 13:00 Hours on 05/10/2021.
14	बयाना राशि जमा के लिए बोली सुरक्षा घोषणा प्रपत्र जमा करने की अंतिम तारीख। Last date for submission of Bid Security Declaration form towards EMD.	श्री शैलेन्द्र त्रिवेदी, प्रभारी अधिकारी (e-tender), प्लाज़मा अनुसंधान संस्थान, भाट, गांधीनगर-382428 के कार्यालय में दि. 05/10/2021 को 13:00 बजे या उससे पहले दूरभाष सं. 079 23962000, 079-23964009 On or before 13:00 Hours on 05/10/2021 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 Date and time of online opening of Technical Bid (Part -I)	दि. 06/10/2021 को 15:00 बजे तकनीकी बोली (भाग-I) प्लाज़मा अनुसंधान संस्थान, भाट, गांधीनगर-382428 में ऊपर दर्शाई गई तारीख और समय पर खोली जाएगी। On 06/10/2021 at 15:00 Hours Technical bid (Part-I) will be opened at Institute for Plasma Research, Near Indira Bridge, Bhat, Gandhinagar - 382428 at the stipulated date and time as above.
16	अर्हता प्राप्त बोलीकर्ताओं की वितीय बोलियों (भाग-II) के खुलने की तारीख और समय। Date of opening of Price Bids (Part -II) of Technically qualified bidders	इसकी सूचना बाद में दी जाएगी। 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, Strom 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 (btpmc), 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 (btpmc), 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, Strom 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
1	Shed Building:	1. Plasma Pyrolysis Area (see attached sketches):	Plasma Pyrolysis
		This consist of Area for	System will generate the Combustible
		a) Plasma Pyrolysis shed of 30 m (L) x 10 m (W) x Clear height under Crane hook 8 m,	Gases which will be burnt in other
		b) Waste storage area of 10 m (L) x 5 m (W) X Clear height 8 m with ceiling,	chamber. Proper Natural Ventilation is required. The
		c) N& O Gen Set of 6 m (L) x 5 m (W) X Clear height 8 m with celling	Plasma Pyrolysis system area external
		d) Power supply room - 5 m (L) x 4 (W) x clear height 4 m with celling	wall shall be provided with Weld Mesh kind of
		e) Control room - 5 m (L) x 4 (W) x clear height 4 m with ceiling	Provision at the top of entire external
		f) Toilet and Wash area	Walls. However, It should be ensure in
		g) Open Platform at Plinth level of Building - 10 m (L) x 3 m (W) for Equipments	the design that there should not be water
		h) Open Platform at Plinth level of Building - 10 m (L) x 3 m (W) for loading unloading	ingress during Rainy season through this
		i) Special Equipment Foundation is required for 40 Tonne Load (covering 2.5 m x 2.5 m = 6.25 Sqm area) See attached drawing.	ventilation Provision.
		2. Plasma Nitriding Area (see attached sketches):	
		This consist of Area for	
		a) Plasma Nitriding Shed of 12 m (L) x 10 m (W) x Clear height under Crane hook 8 m	
		b) Open Platform at Plinth level of Building - 10 m (L) x 3 m (W) for Chiller , Hydrogen Gas and Nitrogen Gas	
		c) Open Platform at Plinth level of Building - 10 m (L) x 3 m (W) for Loading and unloading bay	
		3. Any other Space required for Utility services such as Electrical Power panel, Forced Ventilation, etc. while designing, the same shall be considered in addition to carpet area specified above.	
		4. RCC Road of Minimum 4 m width on all four sides of Building with turning radius for Truck movement	
		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.	

	Civil and Structural Requirements		
2.	Foundations & Works up to Plinth level	a. RCC Structure with RCC foundations, RCC Columns and RCC Beams	
		b. Plinth retaining structure below Plinth level Brick work with RCC beams or RCC Walls/pardi.	
		c. Plinth level shall be minimum 600 mm up from the existing RCC Road.	
		d. Plinth filling with well compacted good earth Murom / Sand Filling, PCC and RCC Flooring Base.	
3.	Super Structure of Building	Steel Structure building with Conventional Steel Sections or Pre-Engineered Steel Sections with paint along with support structure for 10 T EOT crane.	
4.	Walls	1. Steel Structure Building with conventional brick masonry walls with Plaster & 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.	
		Partition are required up to 4 m height.	
		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.	
		b. Between Power supply room and control room	
		c. Between Waste storage area and N&O Gen set	
		d. Between Plasma pyrolysis area and Waste storage area and N& O Gen set and Toilet & Wash area	
		The Building shall be leak proof.	
		Note: Plasma Pyrolysis System will generate the Combustible Gases which will be burnt in other chamber. Proper Natural Ventilation is required. Weldmesh Grill of about approx. 1.5 m height 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.	

5.	Roof	Roof with Pre-coated colour GI/ Galvalume Corrugated / Profile sheets with required slope and Rain water gutter and down take pipe. The Building shall be leak proof.
6.	Flooring	 Plasma Pyrolysis area: RCC Tremix Concrete flooring for 3T/ Sqm Floor loading capacity in entire floor area and Special Equipment Foundation is required for 40 Tonne Load (covering 2.5 m x 2.5 m = 6.25 Sqm area) See attached drawing.
		2. Plasma Nitriding area: RCC Tremix Concrete flooring for 5T/ Sqm Floor loading capacity in entire floor area

7	Doors:	Minimum Doors required	
		(a) Plasma Pyrolysis area:	
		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 & Ramp	Aluminium section frame with 25 micron anodizing and Door shutter of Wooden Exterior grade Ply with laminate on both the sides.
		2. Shutter Doors - Clear 2.3 m x 3.0 m - 4 No - Waste Storage area , N& O Genset	Aluminium section frame with 25 micron anodizing and Door shutter of Door shutter of Wooden Exterior grade Ply with laminate on both the sides.
		3. Shutter for Control Room and Power Supply Room - Door of Clear width of 1.5 m x 2.1 m - 2 No	Aluminium section frame with 25 micron anodizing and Glass panels.
		4. Door for Toilet & Wash area	
			Aluminium section frame with 25 micron anodizing and Door shutter of Wooden Solid board with laminate on both the sides.
		(b) Plasma Nitriding area:	
		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 & Ramp	Aluminium section frame with 25 micron anodizing and Door shutter of Wooden Exterior grade
		All the external openings shall be provided with Weather shed of appropriate width and length to protect against ingress of rain water.	Ply with laminate on both the sides
8.	Rolling Shutters	Motorised Rolling Shutters with all accessories.	Motorised Pre colour coated GI / Galvalume
		1. Plasma Pyrolysis area:	Rolling Shutter of "M/s
		Loading Unloading bay - Entrance 4 m (W) x 6 m (clear Height) - 1 No.	Gandhi Automation" or or M/s Avians
		2. Plasma Nitriding area:	
		6 m (W) x 7 m (clear Height) - 1 No.	
		All the external openings shall be provided with Weather shed of appropriate width and length to protect against ingress of rain water.	

9.	Windows	Windows shall be provided for Natural light and ventilation, opening area as per National Building code and good architectural and engineering practices.	Aluminium Section Sliding/ openable windows with Clear Glass. The Windows shall be
		All the external openings shall be provided with Weather shed of appropriate width and length to protect against ingress of rain water.	provided with MS grills.
10.	Ventilation / Openings	Weldmesh kind of the Grill of about approx. 1.5 m height shall be provided in the external wall of building in Plasma Pyrolysis area for Ventilation.	
		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.	
11.	Three Toilets :	Each Toilet shall consist of atleast following	
	One for Ladies, One for Gents and one for Divyangjan toilet	 Vitrified tiles antiskid flooring Vitrified tiles dado up to lintel level i.e. up to 2.1 m 	
		1.Wash basin (WB) - Sensor based Pillar Cock, Angle cock, PVC connections, waste coupling, Bottle trap,etc. complete	
		 Water Closet (WC)- WC, Health Faucet, Metropole, seat cover, etc. complete Urinal for Gents Toilet with Sensor based flush system One Tap Mirror Liquid soap container 	
		Etc. compete with water supply and drainage lines.	
12	General requirements	1. 4m wide RCC Tremix Road with curbing on all around the building with necessary turning radius for movement of truck.	
		2. Strom water lines with necessary Chamber and grills, etc complete.	
		3. External Drainage lines with Manhole Chambers and connection with existing drainage system.	
		4. Water supply line from existing Pump Hose - Hydro-pneumatic system with necessary control valves to this Building.	

	nting intov al	Two or more coats of SUPER/PREMIUM ACRYLIC
	nting internal faces	EMULSION with Primer and Putty
	astered /	ENTERDIOTY WITH TIME and Tutty
	ment Board,	
Par	rtition, etc.)	
	nting of	Two or more coats of 100% ACRYLIC EXTERIOR
	ernal plastered faces of	EMULSION PAINT (Weather coat of Berger or Apex of Asian Paints or whether shield of ICI)
	proved make	Apex of Asian Faints of whether shield of ICF)
	l colour (
B Ele	ctrical Work.	
1. Lig	hting	1. General Lighting for entire building with
		suitable LED light fixtures suspended from Roof Level for uniform illumination of 300
		Lux at 1 m above floor level.
2. Pov	wer Plug Points	Power Plug Points
	o o	Plasma Pyrolysis area:
		1. 5 / 15 amp Plug Points - 50 Nos.
		2. Three Phase 32 amp industrial Plug points -
		10 Nos.
		3. Three phase 100 Amp industrial Plug Point- 5 Nos.
		Plasma Nitriding area:
		4. 5 / 15 amp Plug Points - NiL.
		5. Three Phase 32 amp industrial Plug points - Nil.
		6. Three Phase 100 Amp Industrial Plug Point- Nil.
		General: Power arrangement for
		1. Crane
		2. Air Conditioners
		3. Motorized Rolling shutters
		4. For all the other Electrical fixtures provided
		by the contractor in the building.
3. Gei	neral	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.

4.	Distribution Panel and control	Main LT Panel as per Electrical Load of Building	
	switches	Lighting Distribution LT Panels and Control switches as per Electrical load	
		Power Plug Distribution LT Panels and Control switches as per Electrical load	
		4. One additional LT Panel for 300 KW - power from DG set. (DG set is to be arranged by USER, IPR)	
		5. One additional Main LT Panel for 100 KW power distribution for User Equipments	
5.	Earthing	Earthing of complete building lighting and power distribution system.	
		 Additional Industrial Grounding type earth pits 8 Nos for User Equipment. 	
		3. Earthing for Building Steel Structure	
6.	Power Connection from existing Source within campus	All modifications / New panel as required at the source end LT Panel and cabling from source to LT panels in Building.	
7.	Lightening protection System	Lighting protection system shall be installed on Building.	
C	Mechanical works		
1.		Remote operated Single Girder EOT Crane (EOT crane of 10 ton Hoisting Capacity of main hook, and 1 Ton hoisting capacity of Auxiliary hook travel length entire Building.	
		Crane Span: approx. 10 m (as per Actual Building width)	
		Longitudinal Travel length of crane: approx. 42 m (as per Actual Building Length)	
		Lifting range - 8 meters Hook height	
		Long Travel Speed - 15 meter per Minute	
		Cross Travel Speed - 15 meter per Minute	
		Main Hoist Lifting speed - 3 meter per Minute	
		All necessary arrangement for support structure, Power arrangement, pendent and Remote control etc. complete	
D	HVAC works		

1.		Supply Installation Testing and commissioning of Inverter Compressor & Five star rating and copper condensing pipes 1. Minimum 2 Ton split Air Conditioners -2Nos in Control Room 2. Minimum 2 Ton split Air Conditioners -2 Nos in Power supply room.
E	PH works	
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.
		2. Internal Distribution lines with schedule 80 pipes concealed in walls with control vlave.
		3. External Drainage RCC hume lines with Manholes and connection in existing drainage line.
		4. External Rain water drainage RCC hume pipe lines with manholes with Grating.

(C) List of Approved Make for the Proposed Project.

1. Civil works:

Sr. No.	Description of Item	Approved Make
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,	Tata, SAIL, RINL, Jindal, Asian,
2	Customised Pre-Engineered Sections.	As per Manufacturer according to Design,
3.	Prefabricated sandwich PIR panels made from Galvalume sheet on both side insulated with rigid Polyisocyanurate foam insulation for Roofing & external wall cladding of colour & pattern	Llyod / Rinac / Metecno / Kingspan, Jindal make
4	Pre coated colour Galvalume Corrugated / Profile sheets	Llyod / Rinac / Metecno / Kingspan , Tata Bluescope, Zamil, Jindal make
5	Anchor fastenr / bolts	Hilti. Fischer, Mungo
6	Motorised Pre colour coated GI / Galvalume Rolling Shutter	Gandhi Automations, Avians
7	Pre-coated steel roofing/ walling sheets 550 Mpa	Tata bluescope, Interarch, Nippon Dendro (poly steel) Meta color
8	Cements (OPC/PPC)	Ultratech, Ambuja, Binani, Birla
9	White Cement	Birla, J.K.
10	TMT - Fe-415 / Fe-500/Fe-500D, Fe 550 D Ribbed bars	Tata, SAIL, RINL (Vizag)
11	Coarse Aggregates (machine cut) 6mm to 40mm sizes	Approved quarry from Sevalia, Vadagam (Hard black trap stone)
12	Stone Rubbles & Gravels	Approved quarry from Sevalia, Vadagam (Hard black trap stone)
13	Shuttering plywood	Kitply, Green ,Durian, Century, Archid, Bloom, Alfica, Anchor
14	Decorative ply (Veneer)	Kitply, Green ,Durian, Century, Archid, Bloom, Alfica, Anchor
15	MDF	Nuwood, Maftalal, Duratuff
16	Prelam particle board	Novapan, Bhutan .(exterior grade only)

17	Laminate sheet	Kitply, Green ,Durian, Century, Archid, Bloom, Alfica, Anchor, Vir
18	Cement bonded particle board	NCL (Bison board), Everest
19	Calcium silicate board	Gypsum India ,Hilux
20	Flush door – decorative / non decorative	Kitply, Green, Durian, Century, Archid, Bloom, Alfica, Anchor, Vir.
21	Compact sheet	Kitply, Green ,Durian, Century, Archid, Bloom, Alfica, Anchor, Vir
22	Locks	Godrej, Dorset, Yale, EPPW.
23	Float Glass / Mirror	Modi guard, Saint gobain, Ashahi
24	Precast terrazo tiles & skirting(Mosaic)	Royal ,Alcock, Vyara, Nitco,.
25	Vitrified tiles	Johnson/ Asian/ Restile/ Nitco/ RAK/ Somani.
26	Construction chemicals	M.C. Bauchemie, Fosroc Sika ,Cico, Pidilite, Dr. Fixit , BAL,
27	Joint Filler / silicon paint	Wacker, Dowcorning, Sika, Chokshi, Dr. Fixit
28	Paint	Asian, Burger, Nerolac, ICI
29	Polish	MRF, Asian, ICI, Taralac,
30	Door Window & Furniture Hardware	Hafle, Kitch, EPPW, Dorma, Ebco, Palladium
31	Adhesives	Fevicol, Kitcol, Araldite, BAL.
32	Floor spring	Everite, Godrej, Hafle, Kitch, EPPW, Dorma, Ebco, Palladium
33	Door closer Hafle, Kitch, EPPW, Dorma, Ebco, Palladium	
34	Aluminum sections	Jindal, Hindalco, Indal.
35	Paver Blocks	Alcock, Vyara

2. PH works (Plumbing an Sanitary works):

Sr. No.	Description of Item	Approved Make
1	PVC PIPE & FITTINGS , DRAIN PIPE & FITTINGS	ASTRAL / SUPREME/PRINCE/ ASHIRWAD
2	GULLY TRAP	SONIA/ SUPREME/ ASTRAL/ PRINCE/ ASHIRWAD
4	RCC HUME PIPES EXTERNAL MAIN UNDER GROUND PIPE	ALCOCK/ INDIAN HUME PIPE / PRANALI/
5	C.I. PIPE & FITTINGS	NICO/BIC
7	M.S/G.I. PIPES FOR WATER SUPPLY	TATA / JINDAL/ ASIAN
8	ASTM/CPVC PIPE & FITTINGS FOR WATER SUPPLY	ASTRAL / SUPREME/ASHIRWAD /PRINCE
9	G.I. PIPES FITTINGS WATER SUPPLY	DRP-M / R-BRAND / ZOLOTO

Sr. No.	Description of Item	Approved Make
12	BALL VALVES	LEADER / ZOLOTO / AUDCO
13	WHEEL VALVES	LEADER / ZOLOTO/AUDCO
14	DCV / NRV	ZOLOTO/SPIREX/AUDCO
18	PLUMBING FIXTURES	JAQUAR / HINDWARE / KOHLAR/CERA
19	SANITARY FIXTURES	JAQUAR/ HINDWARE / CERA /KOHLAR

5. Electrical works:

Sr. No.	Description of Item	Approved Make
1) R	Eigid PVC Conduit :	ISI & FIA approved & manufactured from virgin material. Precision (PPI), NIHIR, Vraj.
2) A	accessories for conduit :	Same make as of pipe.
3) F	lexible Copper Wires :	FRLS type: R.R. Kable, Havell's, Finolex, Polycab, KEI.
4) S	witches :	Legrand (Myrius), MK (Logic), Schnieder(Opale), Salzer (Elite).
5) L	ight Fixture :	Phillips, Havells, Crompton, Wipro, GE,
a	TL/CFL/Lamps or : ny kind of light source	Osram, Philips, Crompton, GE.
	VC tape :	Steel grip, Anchor
8) D	Distribution boards :	Legrand, Schneider MG, L&T, Hager. Factory fabricated. Double door type
9) N	ACCB/MCB/ELMCB :	Legrand (DX3),Schneider MG, L&T, Hager.
10) L	T Cables :	Finolex, Havells, Polycab, KEI.
11) P	anel Fabricators :	CPRI Approved panel builders only
12) L	oad Manager :	Conzerve, Secure, Elmeasure, Rushabh.
13) N	Meters :	Conzerve, Secure, Elmeasure, Rushabh.
14) R	Relay :	Areva, Siemens, L&T, ABB,CSPC, Schnieder
	IRC Fuses & Fuse-Base :	Schneider MG, Siemens, L&T,
	Connectors :	ELMEX, Wago, Telemechanique Connect well.
17) C	Glands :	Compression type, Heavy duty and deep threding with rubber-ring and double washers. (Sample tobe approved)
		HMI, Comet
	Cable Lugs :	Dowell's, 3-D (long neck)
	Ietal Clad	
	lug-socket :	Legrand, Indoasain, RR PCE, BCH, Schnieder
h	Sutton holder, Angle : older, ceiling rose	Anchor, CPL
,	Cable Tray :	OBO, Legrand, Gewiss
	V Cable :	Finolex, RR Cable, Havell's, KEI
	Current Transformer :	AE, Virat, Narmada
,	ndication Lamp :	LED Type: Schneider, L&T, RASS, Salzer
	Voltage Selector S/w :	L&T, Salzer
,	meter Selector S/w :	L&T, Salzer
27) F	ire Stoppers :	Hilti, 3M

28) Raceway : **OBO, MK (Ega), Legrand**

29) Anchor Fastener : **Hilti, 3M**30) Chemical Earthing : **OBO, LPI**31) Whether protected : **Spelsberg, Hensel**

31) Whether protected junction boxes

32) DB Surge protector : Legrand, Schneider, L&T, Hager

33) Telephone TAG block : **Krone**

34) Telephone Cable : **Finolex, Polycab**

35) CAT 6A Data Cable : Dlink

36 Telephone Socket : As same as make of switch

37) Cat 6 A- Data Socket : Legrand, D-Link

38) Fire Alarm & Detection : Honetwell Nitifier, Bosch 39) Access Control System : Honetwell, Bosch, HID

40) Laser detector : VESDA/ICAM Air Terminal nozzle : VESDA/ICAM

Remote display Monitor software Graphic software (for Aspiration system)

6. HVAC works:

Sr. No.	Description of Item	Approved Make
1	Air Conditioners (AC)	LG/ SAMSUNG/ DIAKIN/O-GENERAL/ MITSUBISHI/VOLTAS/ BULESTAR

(IV) REQUIREMENTS AND CRITERIA FOR ELIGIBILTY.

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

Sr. No.	Criteria for Eligibility.	Documentary proof for the eligibility (To be Scanned and Uploaded) Note: The applicants are requested to fill up the facts & figure in the prescribed format. Simply filling like Yes or No shall not be accepted.
1	Should have satisfactorily completed in India construction of Building (s) having construction cost of Project as mentioned below, during last 7 years as on ending previous day of last date of submission of tenders: i. Three projects each costing not less than Rs. 70 Lakhs (or) ii. Two projects each costing not less than Rs. 105 Lakhs (or) iii. One project costing not less than Rs. 140 Lakhs Note: 1. Similar work" means Construction of Conventional RCC or Steel Structure buildings. The value of executed works will be brought to current costing level by enhancing the actual value of work at simple rate of 7 % per annum, calculated from the date of completion to last date of receipt of tender.	Work Orders & Completion certificate for each qualifying completed work(s) issued by an officer not below the rank of Executive Engineer or Equivalent officer or Owner or Client. Note: Completion certificates for works issued by Private parties shall be supported by TDS (Tax deducted at Source) Certificates for the said cost.
2	Should have valid minimum Bank solvency of a Scheduled Bank of Rs. 70 lakhs	Annexure Form " I "- Form of Bankers Certificate from a scheduled Bank

3	Should have had minimum average annual financial turnover of Rs. 87 Lakhs of the construction works during the immediate last three years ending 31 st March , 2020 . 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 two years during the last consecutive five years ending on 31st March, 2020.	Annexure -Form "A": Chartered Accountant certificate for the Annual financial turnover showing Profit & Loss.

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. Work Orders & Completion certificate for each qualifying completed work(s) issued by an officer not below the rank of Executive Engineer or Equivalent officer or Owner or Client.
	Note: Completion certificates for works issued by Private parties shall be supported by TDS (Tax deducted at Source) Certificates for the said cost.
2	Proof of Eligibility Criteria No.2, Annexure Form "I"- Form of Bankers Certificate from a scheduled Bank
3	Proof of Eligibility Criteria No.3 Annexure -Form "A": Financial information, Chartered Accountant certificate for the Annual financial turnover showing Profit & Loss.
4	Proof of Eligibility Criteria No.4 Annexure -Form "A": Financial information, Chartered Accountant certificate for the Annual financial turnover showing Profit & Loss.
5	Letter of Transmittal as per Format given in this document.
6	Bid Security Declaration form.
7	FORM "A" Financial Information
8	Form "B" Details of all Construction works completed during last 7 years ending last day of submission of tender. No works shall be left out. Completion certificates and Work Order / Agreement copy issued by the authority concerned to establish work on hand shall be uploaded.
9	Form "C" Details of project Under Execution (Ongoing project) No works shall be left out. Work Order / Agreement issued by the authority concerned to establish work on hand shall be uploaded.
10	Performance Reports as per Form-"D" for works mentioned Eligibility criteria 1.

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

Note:

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

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