PREQUALIFICATION DOCUMENTS

for

Procurement of

Construction of Knowledge Center, Research Center Complex, Technology Incubation Park, Sports & Cultural Complex, International Guest House, Convention Center, & Academic Quad-1 (Chemistry Building, Material Science & Metallurgical Engineering Building, Bio technology & Bio Medical Engineering Building) and Infrastructure Facilities for the campus development of IIT Hyderabad at Kandi, Sangareddy District, Telangana.

Package 3A

Employer: Indian Institute of Technology Hyderabad

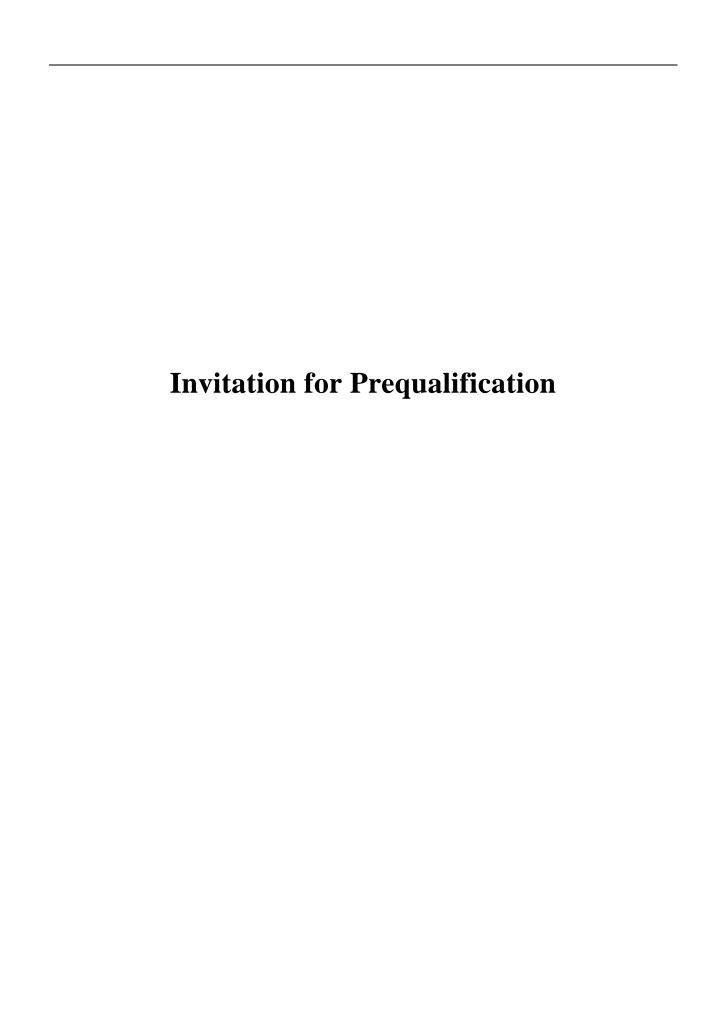
Country: Republic of India

Project: Campus development Project of IIT Hyderabad

Loan No.: ID P-227/234

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Form of Invitation for Prequalification

Date: 05-02-2018

Loan Agreement NO: ID P-227/234

IITH/JICA/PQ-3A

- 1. The Government of India has received a Loan from Japan International Cooperation Agency toward the cost of the Campus development Project of IIT Hyderabad. It is intended that part of the proceeds of this Loan will be applied to eligible payments under the contract resulting from the bidding for which this prequalification is conducted.
- 2. The *Indian Institute of Technology Hyderabad* intends to prequalify contractors and/or firms for "Construction of Knowledge Center, Research Center Complex, Technology Incubation Park, Sports & Cultural Complex, International Guest House, Convention Center & Academic Quad-1 (Chemistry Building, Material Science & Metallurgical Engineering Building, Bio technology & Bio Medical Engineering Building) and infrastructure facilities.
 - The proposed scope of work includes Civil Construction works, Internal & External water supply and sanitary works, Fire Fighting works, Internal Roads, Storm Water Drains, Rain Water Harvesting, Internal & External Electrical Works, Heating Ventilation and Air Conditioning (HVAC), required Infrastructure Development works and linkages with existing main campus services.
- 3. It is expected that Invitation for Bids will be made in June 2018.
- 4. Prequalification will be conducted through procedures in accordance with the applicable Guidelines for Procurement under Japanese ODA Loans, and is open to all Applicants from eligible source countries as defined in the Loan Agreement.
- 5. Interested eligible Applicants may obtain further information form and inspect the Prequalification Documents at the office of the Superintending Engineer, IIT Hyderabad from 1000 Hrs to 1600 Hrs on all working days.
- 6. A complete set of pre-qualification documents may be purchased by interested Applicant(s) on the submission of a written Application to the address above and upon payment of a nonrefundable fee of INR 6500.00.
- 7. Applicants for prequalification should be submitted in sealed envelopes, delivered to the address below by [22-March-2018], and be clearly marked 'Application to Prequalify for Campus Development Project of IIT Hyderabad-Package 3(A)'

K S Ravindra Babu

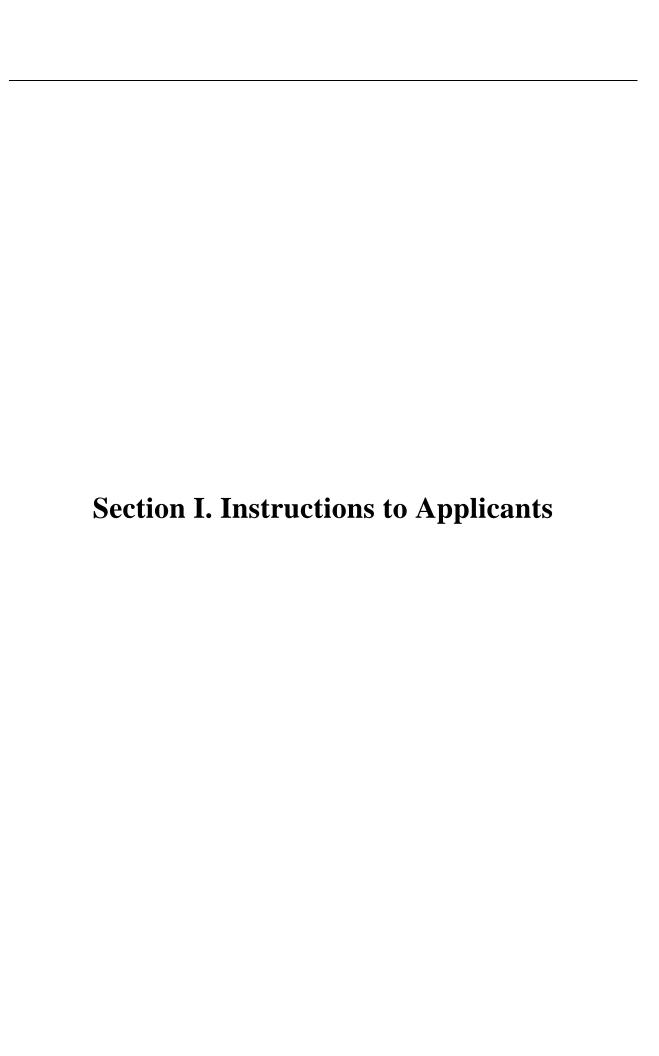
Superintending Engineer

Indian Institute of Technology Hyderabad, Kandi, Sangareddy, 502 285, Telangana, India

Telephone: +91-40- 2301 7202, +91-40- 2301 7222

Facsimile number: +91-40- 2301 6032 Electronic mail address: secivil@iith.ac.in

PART 1 – Prequalification Procedures



Section I. Instructions to Applicants

The Instructions to Applicants governing this prequalification process are the "Instructions to Applicant" included in Section I of the Standard Prequalification Documents (version 1.1), published by JICA in October 2012. Those Instructions to Applicants are available on the JICA's web site shown below:

http://www.jica.go.jp/english/our_work/types_of_assistance/oda_loans/oda_op_info/guide/tende r/index.html

Copy of these Instructions to Applicants is not attached to these Prequalification Documents.

	Section II.	Prec	ualification	Data	Sheet
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Section II. Prequalification Data Sheet

Prequalification Data Sheet

	A. General				
ITA 1.1	The number of the Invitation for Prequalification is: IITH/JICA/PQ-3A				
ITA 1.1	The Employer is: Indian Institute of Technology Hyderabad				
The name, identification, and number of the lot(s) (contract(s)) are: Construct of Knowledge Center, Research Center Complex, Technology Incubation Park, Sports & Cultural Complex, International Guest House, Convert Center & Academic Quad-1 (Chemistry Building, Material Science Metallurgical Engineering Building, Bio technology & Bio Metallurgical Engineering Building, Infrastructure Facilities for the care development of IIT Hyderabad at Kandi, Sangareddy District, Telang India.					
ITA 2.1	The name of the Borrower is: Government of India				
ITA 2.1	The number of the Loan Agreement is: ID P-227/234				
The amount of a Japanese ODA Loan is: JPY 23,035 million (ID-P227: JPY 5,332 million; ID-P234: 17,703 million)					
	The signed date of the Loan Agreement is: 28-01-2014				
ITA 2.1	The name of the Project is: Campus development Project of IIT Hyderabad.				
ITA 2.2	The applicable Guidelines for Procurement under Japanese ODA Loans a those published in <i>April 2012</i> ,				
ITA 3.1 (c)	A list of debarred firms and individuals is available at the World Bank's website: www.worldbank.org/debarr				
ITA 4.1	An applicant shall be either:				
	a) An Indian Company incorporated under Companies Act 2013 OR				
	b) A Foreign Company registered under relevant legislation in its Country of origin.				
ITA 4.2 The number of JV members shall not be more than 4 (four) inclusive Partner.					
	B. Contents of the Prequalification Documents				
ITA 5.1	Eligible applicants can download the complete pre-qualification document from the website address indicated below and submit completed Application along with all enclosures on or before the due date and time of submission.				
	http://www.iith.ac.in/index.php/tenders-notices				

The pre-qualification document fee of Rs. 6500/- shall be paid in the form of Demand Draft drawn from any Indian Nationalized / Scheduled Bank in favor of Indian Institute of Technology, Hyderabad payable at Hyderabad along with the completed pre-qualification application document. Alternatively, this can also be paid directly to the Bank as per particulars given below: Name of the Account Holder : Indian Institute of Technology Hyderabad : 30454644537 (Current Account) Account Number Name of the Bank : State Bank of India Address of the Bank : IIT Kandi, IIT Hyderabad Campus, Kandi, Sangareddy, Telangana - 502285 Branch code IFSC code : SBIN0014182 MICR code : 502002528 SHIFT code : SBININBB762 **ITA 6.1** For **clarification purposes** only, the Employer's address is: Attention: K S Ravindra Babu, Superintending Engineer Street Address: Indian Institute of Technology Hyderabad Kandi, Sangareddy District, Telangana, City: Hyderabad ZIP Code: 502 285 Country: India Telephone: +91-40-2301 7202; +91-40-2301 7222 Facsimile number: +91-40-2301 6032 Electronic mail address: <u>secivil@iith.ac.in</u> ITA 6.1 & 7.2 All request for clarifications shall be received at the Employer's address 5(five) days prior to the date of pre-Application meeting. Any request for clarification received later than the date and time shall not be considered. All responses to request for clarification, if any, will be published on the Employer's web page. http://www.iith.ac.in/index.php/tenders-notices **ITA 6.2** A pre-Application meeting will take place at the following date, time and place: Date: 19-February-2018 Time: 11.00AM Place: Indian Institute of Technology Hyderabad Kandi, Sangareddy District, Pin Code: 502 285, Telangana, India

	C. Preparation of Applications						
ITA 9.1	The language of the Application as well as of all correspondence is: English						
ITA 10.1 (e)	The Applicant shall submit with its Application, the following additional documents:						
 a) Section III, Sub-Factor 3.1(c), Financial Performance – Profit/Los Status: b) Section III, Sub-Factor Section 4.1: For Indian Firms, Certificate of Incorporation under Companies Act 2013 and for Foreign Companies certificate of registration under relevant legislation in its Country origin. 							
	c) Section III, Sub-Factor 4.2(c), Specific Construction Experience – Building Information Modelling (BIM) Capability (Key Activity): A copy						
	of the active license certificate of BIM software for three years prior to the application submission deadline.						
ITA 13.2	The source for determining exchange rates is Reserve Bank of India.						
	Wherever the currency is indicated in "Rs." or "INR", it means in "Indian Rupees".						
ITA 14.1	The following sentence shall be added to the end of ITA 14.1:						
	All documents must be hard bound. No loose papers will be accepted. All pages shall be Machine numbered.						
ITA 14.2	In addition to the original, the number of copies to be submitted with the Application is: Three sets of copies and one electronic version (PDF on CD).						
	D. Submission of Applications						
ITA 16.1	Submission of applications for pre-qualification must be received in sealed envelope						
The deadline for Application submission is:							
Date: 22-March-2018							
	Time: 3.00 p.m						
	For Application submission purposes only, the Employer's address is:						
	Attention: K S Ravindra Babu, Superintending Engineer Street Address:						

	Indian Institute of Technology Hyderabad Kandi,						
	Sangareddy District, Telangana,						
	City: Hyderabad						
	ZIP Code: 502 285						
	Country: India						
	Telephone: +91-40- 2301 7202; +91-40-2301 7222						
	Facsimile number: +91-40-2301 6032						
	Electronic mail address: <u>secivil@iith.ac.in</u>						
ITA 17.1	The Applications received later than the deadline for Application submission will not be accepted.						
ITA 18.1	The opening of the Applications shall be at 22-March-2018, 3.00p.m, at <i>Indian</i>						
	Institute of Technology Hyderabad, Kandi, Sangareddy District, 502 285, Telangana ,India						
	E. Procedures for Evaluation of Applications						
F. Eva	luation of Applications and Prequalification of Applicants						
ITA 22.2	At this time the Employer does not intend to execute certain specific parts of the Works by subcontractors selected in advance (Nominated Subcontractors).						
ITA 23.3	As stipulated in ITA 1.1, this prequalification exercise shall be for a single contract.						
ITA 27.3	The Bidding Documents will be prepared in accordance with the Standard Bidding Documents for the Procurement of <i>works</i> published by JICA.						

Section III. Qualification Criteria and Requirements

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1. Experience	••

		and Qualification Criteria		Compliance Requirements Joint Venture (existing or intended)			Documentation Submission
No.	Factor	Requirement	Single Entity	All Parties Combined	Each Member	One Member	Requirements
1. I	Eligibility						
1.1	Nationality	Nationality in accordance with ITA Sub- Clause 4.3	Must meet requirement	N/A	Must meet requirement	N/A	Forms ELI – 1.1 and 1.2, with attachments
1.2	Conflict of Interest	No conflicts of interest in ITA Sub- Clauses 4.4, 4.5 and 4.6	Must meet requirement	N/A	Must meet requirement	N/A	Application Submission Form
1.3	JICA Ineligibility	Not having been declared ineligible by JICA, as described in ITA Sub-Clause 4.7	Must meet requirement	N/A	Must meet requirement	N/A	Application Submission Form & Form ACK
2. I	Historical Co	ntract Non-Performance			_		_
2.1	History of Non- Performing Contracts	Non-performance of a contract ⁽ⁱ⁾ did not occur as a result of contractor's default since 1 st January 2015.	Must meet requirement (ii)	N/A	Must meet requirement ⁽ⁱⁱ⁾	N/A	Form CON – 2
2.2	Pending Litigation	All pending litigation shall in total not represent more than 50% of the Applicant's net worth and shall be treated as resolved against the Applicant.	Must meet requirement ⁽ⁱⁱ⁾	N/A	Must meet requirement ⁽ⁱⁱ⁾	N/A	Form CON – 2
2.3	Litigation History	No consistent history of court/arbitral award decisions ^(iv) against the Applicant ⁽ⁱⁱⁱ⁾ since 1 st January 2013.	Must meet requirement(ii)	N/A	Must meet requirement ⁽ⁱⁱ⁾	N/A	Form CON – 2

Notes for the Applicant

⁽i) Non-performance, as decided by the Employer, shall include all contracts

⁽a) where non-performance was not challenged by the contractor, including through referral to the dispute resolution mechanism under the respective contract, and

Eligibility and Qualification Criteria			Compliance Requirements				Documentation
					Joint Venture existing or intended	1)	Culturiarian
No.	Factor	Requirement	Single Entity	All Parties Combined	Each Member	One Member	Submission Requirements

(b) that were so challenged but fully settled against the contractor.

Non-performance shall not include contracts where Employer's decision was overruled by the dispute resolution mechanism. Non-performance must be based on all information on fully settled disputes or litigation, i.e. dispute or litigation that has been resolved in accordance with the dispute resolution mechanism under the respective contract and where all appeal instances available to the Applicant have been exhausted.

- (ii) This requirement also applies to contracts executed by the Applicant as a JV member.
- (iii) The Applicant shall provide accurate information on the related Application Form about any litigation or arbitration resulting from contracts completed or ongoing under its execution over the last five (5) years. A consistent history of awards against the Applicant or any member of a joint venture may result in failure of the Application.
- (iv) The occurrence of one (1) or two (2) adverse cases over five (5) years for a Contractor handling, on average, ten (10) similar contracts simultaneously, should not be a cause for rejection.

3. Financial Situation

3.1	Financial Performance	The audited balance sheets or, if not required by the laws of the Applicant's country, other financial statements acceptable to the Employer, for the last 05(Five) years shall be submitted and must demonstrate the current soundness of the Applicant's financial position and indicate its prospective long-term profitability. As the minimum requirement, an Applicant's net worth calculated as the difference between total assets and total liabilities should be positive.	Must meet requirement	N/A	Must meet requirement	N/A	Form FIN – 3.1 with Attachments
3.1(c)	Financial Performance- Profit / Loss Status	The applicant shall not have incurred any loss in more than 2 (two) years during the last 5 (five) years prior to the application submission deadline.	Must meet requirement (i)	N/A	Must meet	N/A	Form FIN – 3.1 including Bid Capacity ^(vii) workout and value
	Status	Submission deadine.	(II)		requirement		of balance Jobs in

	Eligibility and Qualification Criteria			Compliance	Requirements		Documentation
	_	_		(Joint Venture existing or intende	d)	Submission
No.	Factor	Requirement	Single Entity	All Parties Combined	Each Member	One Member	Requirements
							hand.
3.2	Average Annual Construction Turnover	Minimum average annual construction turnover of Rs 700 Crores, calculated as total certified payments received for contracts in progress and/ or completed, within the last 05(five) years, divided by 05(five) years i.	Must meet requirement ^{(i) (vi)}	Must meet requirement	Must meet 25% of requirement.	Must meet 40% of requirement.	Form FIN – 3.2

Notes for the Applicant:

(i) Building Sector project means, Civil, Architectural, Plumbing, Electrical, Fire Fighting, HVAC works involved in Commercial, Educational and Residential sectors only. Industrial, Infrastructure works will not be considered.

4. Experience

4.1	General Construction Experience	Experience under construction contracts in the role of prime contractor (single entity or JV member), or subcontractor, (i) for at least the last 05 years, starting 1st January 2013.	Must meet requirement (xii) (xiii)	N/A	Must meet requirement	N/A	Form EXP – 4.1 ,EXP-4.1 (a) and Form EXP -4.2(c1) with attachments.
4.2 (a)	Specific Construction Experience	A minimum number contracts for construction of similar Building sector projects ii, ix that have been satisfactorily and substantially iii between 1st January 2007 and Application submission deadline.xi	Must meet a minimum of One work of Rs 600 Crores OR Two of Rs. 480 Crores OR Three of Rs. 240 Crores ⁽ⁱ⁾	Must meet requirement	Must meet a minimum of one work of Rs 200 Crores OR Two works of Rs. 150 Crores OR Three works of Rs. 80 Crores ^(iv)	Must meet a minimum of one of work Rs 500 Crores OR Two works of Rs. 350 Crores OR Three works of Rs. 200 Crores (iii)	Form EXP – 4.2(a) , EXP- 4.2(a1) and EXP-4.2(c1) with Attachments
4.2 (b)	Specific Construction Experience	For the above or other contracts completed and under implementation as prime contractor (single entity or JV	Must meet requirement	Must meet requirement	N/A	N/A	Form EXP – 4.2 (b1) & Form EXP – 4.2 (b2)

	Eligibility	and Qualification Criteria		Compliance	Requirements Joint Venture		Documentation
			a	(existing or intende	d)	Submission
No.	Factor	Requirement	Single Entity	All Parties Combined	Each Member	One Member	Requirements
		member), or subcontractor (vi) between 1st January 2007 and Application submission deadline, a minimum construction experience in the following key activities successfully completed (viii) (vii) Concrete Volume - 1,00,000m³ in one project Structural Steel - 550 MT in one project Structural Glazing - 13,500 m² in one project Form Finish Concrete - 5000 m² Post Tension Slabs - 2000 m² in one project District cooling system with plant capacity not less than 2000 TR across two projects. §(viii) (ix)					
4.2 (c)	Specific Construction Experience	The Applicant should demonstrate capabilities of Building Information Modelling (BIM).	Must meet requirement	Must meet requirement	N/A	Must meet requirement	A copy of the active license certificate of BIM software for three years prior to the application submission deadline.

Notes for the Applicant

(i) A management contractor is a firm which takes on the role of contract management as a "general" contractor of sort could do. It does not normally perform directly the construction work(s) associated with the contract. Rather, it manages the work of other (sub) contractors while bearing full responsibility and risk for price, quality, and timely performance of the work contract.

Eligibility and Qualification Criteria			Compliance Requirements			Documentation	
					Joint Venture	•	
					existing or intended	1)	Submission
No.	Factor	Requirement	Single Entity	All Parties Combined	Each Member	One Member	Requirements

- (ii) The similarity shall be based on the physical size, complexity, methods/technology and/or other characteristics described in Section VI, Scope of Works. Summation of number of small value contracts (less than the value specified under requirement) to meet the overall requirement will not be accepted.
- (iii) Substantial completion shall be based on 80% or more of the works completed under the contract.
- (iv) For contracts under which the Applicant participated as a JV member, only the Applicant's share, by value, shall be considered to meet this requirement.
- (v) In case of a JV, the value of contracts completed by its members shall not be aggregated to determine whether the requirement of the minimum value of a single contract has been met. Instead, each contract performed by each member shall satisfy the minimum value of a single contract as required for single entity. In determining whether the JV meets the requirement of total number of contracts, only the number of contracts completed by all members, each of value equal or more than the minimum value required shall be aggregated.
- (vi) For contracts under which the Applicant participated as a JV member or subcontractor, only the Applicant's share, by value, shall be considered to meet this requirement.
- (vii) Volume, number or rate of production of any key activity can be demonstrated in one or more contracts combined if executed during same time period. The rate of production shall be the annual production rate for the key construction activity (or activities). For the rate of production, either the average during the entire period or in any one or more years during the period should be specified.
- (viii) The minimum experience requirement for multiple contracts will be the sum of the minimum requirements for respective individual contracts.
- (ix) Building Sector project means, Civil, Architectural, Plumbing, Electrical, Fire Fighting, HVAC works involved in Commercial, Educational and Residential sectors only. Industrial, Infrastructure works will not be considered.
- (x) Lead member of JV must meet the requirement.
- (xi) Jobs executed on a nomination basis from within group companies or others do not qualify. Group company / Sister Company Mean: A Group / Sister Company is a company with close affiliations to another company with a separate name and personnel. Both companies are owned by the same parent and are considered subsidiaries of the larger company.
- (xii) Single Entity: Any standalone International Company or International company with Indian Subsidiary or any Indian Company that fulfills the qualification requirements will be treated as Single Entity.
- (xiii) For an International company associated with its Indian subsidiary, the International company and Indian subsidiary shall meet requirement.

Section IV. Application Forms

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-	

Application Submission Form

Date: [insert day, month, year]
IFP No.: [insert number]

To: [insert full name of Employer]

We, the undersigned, apply to be prequalified for the contract of referenced number and declare that:

- (a) We have examined and have no reservations to the Prequalification Documents, including Addendum(s) No(s)., issued in accordance with Instructions to Applicants (ITA) 7: [insert the number and issuing date of each Addendum]
- (b) We, including subcontractor, meet the eligibility requirements as stated in ITA 4.
- (c) We, including subcontractor, have no conflict of interest in accordance with ITA 4.
- (d) We, in accordance with ITA 22.1, plan to subcontract the following key activities and/or parts of the Works:
 - [insert any of the key activities identified in Section III- 4.2 (b) which the Applicant intends to subcontract]
- (e) We understand that you may cancel the prequalification process at any time and that you are neither bound to accept any Application that you may receive nor to invite the prequalified Applicants to bid for the contract subject of this prequalification, without incurring any liability to the Applicants, in accordance with ITA 24.
- (f) All information, statements and description contained in the Application are in all respect true, correct and complete to the best of our knowledge and belief.

Signed [insert signature(s) of an authorized representative(s) of the Applicant]

Name [insert full name of person signing the Application]

In the capacity of [insert capacity of person signing the Application]

Duly authorized to sign the Application for and on behalf of:

Applicant's name [insert full name of Applicant]

Address [insert street number/town or city/country address]

Dated on [insert day number] day of [insert month], [insert year]

[For a JV, an authorized representative of the JV shall sign, in which case the power of attorney to sign on behalf of all members shall be attached.]

Form ELI -1.1 **Applicant Information Form**

Date: [insert day, month, year]
IFP No.: [insert number]
Page [insert page number] of [insert total number] pages

Applicant's legal name					
[insert full name]					
In case of a JV, legal name of the representative member and each member:					
[insert full name of each member in the JV and specify the representative member.]					
Applicant's actual or intended country of registration:					
[insert country of registration]					
Applicant's actual or intended year of incorporation:					
[insert year of incorporation]					
Applicant's legal address in country of registration:					
[insert street/ number/ town or city/ country]					
Applicant's authorized representative information					
Name: [insert full name]					
Address: [insert street/ number/ town or city/ country]					
Telephone/Fax numbers: [insert telephone/fax numbers, including country and city codes]					
E-mail address: [insert E-mail address]					
1. Attached are copies of original documents of					
Articles of Incorporation (or equivalent documents of constitution or association), and/or registration documents of the legal entity named above, in accordance with ITA 4.3.					
☐ In case of a JV, letter of intent to form JV or JV agreement, in accordance with ITA 4.2.					
2. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership.					

Form ELI -1.2 Applicant's Party Information Form

[The following form is additional to Form ELI - 1.1., and shall be completed to provide information relating to each JV member (in case the Applicant is a JV) as well as any specialist subcontractor proposed to be used by the Applicant for any part of the Contract resulting from this prequalification]

Date: [insert day, month, year]
IFP No.: [insert number]
Page [insert page number] of [insert total number] pages

Applicant's legal name:
[insert full name]
Applicant's Party legal name:
[insert full name of Applicant's party]
Applicant's Party country of registration:
[insert country of registration]
Applicant's Party year of incorporation:
[insert year of incorporation]
Applicant's Party legal address in country of registration:
[insert street/ number/ town or city/ country]
Applicant's Party authorized representative information
Name: [insert full name]
Address: [insert street/ number/ town or city/ country]
Telephone/Fax numbers: [insert telephone/fax numbers, including country and city codes]
E-mail address: [insert E-mail address]
1. Attached are copies of original documents of
Articles of Incorporation (or equivalent documents of constitution or association), and/or registration documents of the legal entity named above, in accordance with ITA 4.3.
2. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership.

Form CON - 2 Historical Contract Non-Performance

[The following table shall be filled in for the Applicant and for each member of a JV]

Date: [insert day, month, year]

Applicant's Legal Name: [insert full name]

Applicant's Party Legal Name :[insert full name]

IFP No.: [insert number]

Page [insert page number] of [insert total number] pages

1. History of Non-Performing Contracts

	Non-Performing Contracts							
	□ Contract non-performance did not occur since 1 st January [insert year], in accordance with Section III, Qualification Criteria and Requirements, Sub-Factor 2.1.							
	□ Contract(s) not performed since 1 st January [insert year] in accordance with Section III, Qualification Criteria and Requirements, Sub-Factor 2.1 as indicated below.							
Year	Non performed portion of contract	Contract Identification	Total Contract Amount (current value, currency, exchange rate and USD equivalent)					
[insert year]		Contract Identification: [indicate complete contract name, number, and any other identification] Name of Employer: [insert full name]	[insert amount]					
		Address of Employer: [insert street/city/country] Reason(s) for non performance: [indicate main reason(s)]						

2. Pending Litigation

Pending Litigation

- □ No pending litigation in accordance with Section III, Qualification Criteria and Requirements, Sub-Factor 2.2.
- □ Pending litigation in accordance with Section III, Qualification Criteria and Requirements, Sub-Factor 2.2 as indicated below.

Year of dispute		Outcome as Percentage of Net Worth	Contract Identification	Total Contract Amount (current value, currency, exchange rate and USD equivalent)
[insert	[insert	[insert	Contract Identification: [indicate complete contract name, number, and any other identification] Name of Employer: [insert full name] Address of Employer: [insert street/city/country] Matter in dispute: [indicate main issues in dispute] Status of dispute: [Indicate if it is being treated by the Adjudicator, under Arbitration or being dealt with by the Judiciary]	[insert
year]	amount]	percentage]		amount]

3. Litigation History

	Litigation History						
	□ No court/arbitral award decisions against the Applicant since 1 st January [insert year], in accordance with Section III, Qualification Criteria and Requirements, Sub-Factor 2.3.						
	□ Court/ arbitral award decisions against the Applicant since 1 st January [insert year], in accordance with Section III, Qualification Criteria and Requirements, Sub-Factor 2.3 as indicated below.						
Year of		Contract Identification	Total Contract				

Year of award	Contract Identification	Total Contract Amount (current value, currency, exchange rate and USD equivalent)
[insert year]	Contract Identification: [indicate complete contract name, number, and any other identification] Name of Employer: [insert full name] Address of Employer: [insert street/city/country] Matter in dispute: [indicate main issues in dispute] Party who initiated the dispute: [indicate "Employer" or "Contractor"] Status of dispute: [indicate if it is being treated by the Adjudicator, under Arbitration or being dealt with by the Judiciary]	[insert amount]

Form FIN - 3.1 Financial Situation

[The following table shall be filled in for the Applicant and for each member of a JV]

Date: [insert day, month, year]

Applicant's Legal Name: [insert full name]

Applicant's Party Legal Name: [insert full name] IFP No.: [insert number]

Page [insert page number] of [insert total number] pages

1. Financial data

Type of Financial information in (currency)	Historic Information for Previous [insert number] years (amount in currency, currency, exchange rate*, USD equivalent)					
	Year 1	Year 2	Year 3	Year 4	Year 5	
Statement of Fina	ancial Posit	ion (Informa	ation from B	alance Shee	t)	
Total Assets (TA)						
Total Liabilities (TL)						
Net Worth (NW)						
Current Assets (CA)						
Current Liabilities (CL)						
Inf	ormation f	rom Income	Statement			
Total Revenue (TR)						
Profits Before Taxes (PBT)						
Profits After Taxes (PAT)						

2. Financial documents

The Applicant and its members shall provide copies of financial statements for [number of years]

years pursuant to Section III, Qualifications Criteria and Requirements, Sub-Factor 3.1. The financial statements shall:

- (a) Reflect the financial situation of the Applicant or in case of a JV, of each member, and not of an affiliated entity (such as parent company or group member).
- (b) be independently audited or certified in accordance with local legislation.
- (c) be complete, including all notes to the financial statements.
- (d) correspond to accounting periods already completed and audited.
- ☐ Attached are copies of financial statements** for the [number of years] years required above, and complying with the requirements.
- * Refer to ITA 13.2 for the exchange rate.
- ** If the most recent set of financial statements is for a period earlier than 12 months from the date of Application, the reason for this should be justified.

Form FIN - 3.2 Average Annual Construction Turnover

[The following table shall be filled in for the Applicant and for each member of a JV]

Date: [insert day, month, year]

Applicant's Legal Name: [insert full name]

Applicant's Party Legal Name: [insert full name]
IFP No.: [insert number]

Page [insert page number] of [insert total number] pages

Annual Turnover Data (Construction only)						
Year	Amount and Currency	Exchange Rate*	USD Equivalent			
[indicate year]	[insert amount and indicate currency]	[insert applicable exchange rate]	[insert amount in USD equivalent]			
	Average Annual Constru	action Turnover **				

- * Refer to ITA 13.2 for date and source of exchange rate.
- ** Total USD equivalent for all years divided by the total number of years. See Section III, Qualification Criteria and Requirements, Sub-Factor 3.2.

Form EXP - 4.1 General Construction Experience

[The following table shall be filled in for the Applicant and for each member of a JV]

Date: [insert day, month, year]

Applicant's Legal Name: [insert full name]

Applicant's Party Legal Name: [insert full name]

IFP No.: [insert number]

Page [insert page number] of [insert total number] pages

[Identify contracts that demonstrate continuous construction work over the past [number] years pursuant to Section III, Qualification Criteria and Requirements, Sub-Factor 4.1. List contracts chronologically, according to their commencement (starting) dates.]

General Construction Experience				
Starting Year	Ending Year	Contract Identification	Role of Applicant	
[indicate year]	[indicate year]	Contract name: [insert full name] Brief description of the Works performed by the Applicant: [describe Works performed briefly] Amount of contract: [insert amount in currency, mention currency used, exchange rate and USD equivalent*] Name of Employer: [indicate full name] Address: [indicate street/number/town or city/country]	[insert "Prime Contractor (single entity or JV member)" or "Subcontractor" or "Management Contractor"]	

^{*} Refer to ITA 13.2 for date and source of exchange rate.

[The above information shall be supported with copies of Letter of Award, Work order, Project Completion Certificates]

Date: [insert day, month, year]

Form EXP - 4.1(a) Completion Certificate from Client

[The following table shall be filled in for the Applicant and for each member of a JV]

Applicant's Legal Name: [insert j Applicant's Party Legal Name: [insert j IFP No : [insert						
IFP No.: [insert number Page [insert page number] of [insert total number] page [Fill out one (1) form per contract.]						
Name & address of the Client						
Details of Works executed by	•••••••					
1. Name of work with brief particulars						
2. Agreement No. and date (or) Contract No						
3. Date of commencement of work						
4. Stipulated date of completion						
5. Actual date of completion						
6. Details of compensation levied for delay, if any						
7. Initial Value of the Contract						
8. Value of the contract Executed						

The completion certificate confirms that the work described in the above mentioned has been completed on DD-MM-YYYY in accordance with the specification, standards and conditions prescribed under the contract.

[The above information shall be supported with copies of Letter of Award, Work order, Project Completion Certificates]

Form EXP - 4.2(a) Specific Construction Experience

[The following table shall be filled in for the Applicant and for each member of a JV]

Date: [insert day, month, year]

Applicant's Legal Name: [insert full name]

Applicant's Party Legal Name: [insert full name]

IFP No.: [insert number]

Page [insert page number] of [insert total number] pages

[Fill out one (1) form per contract.]

Contract of Similar Size and Nature							
Similar Contract No. [insert number] of [insert number of similar contracts required]	Information						
Contract Identification	[insert contract name and Reference ID number, if applicable]						
Award Date	[insert a	lay, month, year,	e.g., 15 June, 2015]				
Completion Date	[insert day	y, month, year, e.	g., 03 October, 2017]				
Role in Contract		Prime Co					
[check the appropriate box]	Sing	le entity □	JV member □				
Total Contract Amount	[insert total cand currency	contract amount (ies)]	USD [insert exchange rate and total contract amount in USD equivalent]*				
If member in a JV, specify participation in total Contract amount	[insert a percentage amount]	[insert total contract amount and currency(ies)]	USD [insert exchange rate and total contract amount in USD equivalent]*				
Employer's Name:	[insert full name]						
Address:	[indicate street / number / town or city / country]						
Telephone/Fax Number:	[insert telephone/fax numbers, including country and city area codes]						
E-mail:	[insert E-mail address, if available]						

Similar Contract No. [insert number] of [insert number of similar contracts required]	Information
Description of the similarity in accordance with Sub-Factor 4.2(a) of Section III:	
1. Physical Size of required works items	[insert physical size of items]
2. Complexity	[insert description of complexity]
3. Methods/Technology	[insert specific aspects of the methods/ technology involved in the contract]
4. Other Characteristics	[insert other characteristics as described in Section VI, Scope of Works]

 $[\]ast$ Refer to ITA 13.2 for date and source of exchange rate.

Form EXP - 4.2 (a1) Specific Construction Performance Certificate

Date: [insert day, month, year]
Applicant's Legal Name: [insert full name]
Applicant's Party Legal Name: [insert full name]
Subcontractor's Legal Name [insert full name]

IFP No.: [insert number]

Page [insert page number] of [insert total number] pages

[Fill out one (1) form per contract.]						
Name & address of the Client						
Details of Works executed by	•••••••••••••••••••••••••••••••••••••••					
••••••						
1. Name of work with brief particulars						
2. Agreement No. and date(*)						
3. Date of commencement of work						
4. Stipulated date of completion						
5. Actual date of completion						
6. Details of compensation levied for delay, if any						
7. Value of the contract (*)						
8. Name and address of the authority under whom works executed.						
9. Whether the contractor employed qualified Engineer/Overseer during execution of work?						
10. i) Quality of work (indicate grading)						
ii) Amount of work paid on reduced rate basis, if any.						
11. Comments on the Capabilities of the						

Outstanding/ V.Good/ Good/ Poor
Outstanding/V.Good/Good/Poor
Outstanding/V.Good/Good/Poor
Outstanding/V.Good/Good/Poor
Outstanding/V.Good/Good/Poor

Note: All columns shall be filled in properly.

[The above information shall be supported with copies of Letter of Award, Work order, Project Completion Certificates]

Form EXP - 4.2(b1) Specific Construction Experience in Key Activities

Date: [insert day, month, year]

Applicant's Legal Name: [insert full name] Applicant's Party Legal Name: [insert full name]

Subcontractor's Legal Name [insert full name]

IFP No.: [insert number]

Page [insert page number] of [insert total number] pages

[Fill out one (1) form per contract.]							
Key Activity No. (1): [insert braspecificity]	ief description	of th	e Activii	ty, emphasizin	g its		
Total Quantity of Activity under the co.	ntract:						
Contract with Similar Key Activities							
Item			Inf	formation			
Contract Identification	[insert	contr	act name	e and number,	if applicable]		
Award Date	[insert	day,	month,	year, e.g., 15 J	June, 2015]		
Completion Date	[insert d	lay, m	onth, ye	ear, e.g., 03 Oc	tober, 2017]		
Role in Contract	Prime C	ontra	ctor	Management	Subcontractor		
[check the appropriate box]	Single entity	JV 1	nember	Contractor			
Total Contract Amount	[insert total camount in loc			USD [insert Exchange rat contract amon equivalent]*			
Quantity (Volume, number or rate of production, as applicable) performed under the contract per year or part of the year [Insert extent of participation indicating actual quantity of key activity successfully completed in the role performed]	Total quanti the contra (i)	•		ercentage articipation (ii)	Actual Quantity Performed (i) x (ii)		
Year 1							
Year 2							
Year 3							
Year 4							

[insert full name]
[indicate street / number / town or city / country]
[insert telephone/fax numbers, including country and
city area codes] [insert E-mail address, if available]

 $[\]ast$ Refer to ITA 13.2 for date and source of exchange rate.

- 2. Activity No. (2) _____
- 3. Activity No. (3) _____

Form EXP - 4.2 (b2) Client Certificate(s) for Key Activities listed in 4.2 (b)

Date: [insert day, month, year]
Applicant's Legal Name: [insert full name]
Applicant's Party Legal Name: [insert full name]
Subcontractor's Legal Name [insert full name]

IFP No.: [insert number]

Page [insert page number] of [insert total number] pages

Name & address of the Client	
Details of Works executed by	
1. Name of work with brief particulars	
2. Agreement No. and date (or) Contract No	
3. Date of commencement of work	
4. Stipulated date of completion	
5. Actual date of completion	
6. Total Quantity of Key Activity under the contract	

The completion certificate confirms that the work described in the above mentioned has been completed on DD-MM-YYYY in accordance with the specification, standards and conditions prescribed under the contract.

[The above information shall be supported with copies of Letter of Award, Work order, Project Completion Certificates]

[For key activity related to BIM 3D, a copy of the current active license certificate of BIM software for three years to be submitted]

]

Form EXP - 4.2(c1) Financial Details of Completed Building Projects

[The following table shall be filled in for the Applicant and for each member of a JV]

Date: [insert day, month, year]

Applicant's Legal Name: [insert full name]

Applicant's Party Legal Name :[insert full name]

IFP No.: [insert number]

Page [insert page number] of [insert total number] pages

S. No	Name of work / Project & Location	Owner or Client	Value of work at completi on	Updated (***) Gross present value with multiplying factor	Date of commenc ement as per contract	Stipulated date of completion	Actual date of complet ion	Remarks
1.								
2.								
3.								
4.								
5.								

Certified that the above list of work is complete and that the information given is correct to my knowledge and belief.

Signature of Applicant(s)

 $[^{(**)}Updated\ Value\ of\ Completion\ cost = C\ x\ (1+10\%)^n$

Where *C* is the cost of completion and *n* is the number of years after completion.

Multiplying factors for Cost Updating:

Year of Completion	Multiplying Factor
2016-17	0.0
2015-16	1.1
2014-15	1.2
2013-14	1.3
2012-13	1.4

[The following	table	shall	be	filled-in	and	certified	by	the	Owner	/	Client	for	each	of	the
completed build	ding pi	rojects	lis	ted above	e.]										

Name & address of the Client	
Details of Works executed by	•••••

.....

1. Name of work with brief particulars	
2. Agreement No. and date (or) Contract No	
3. Date of commencement of work	
4. Stipulated date of completion	
5. Actual date of completion	
6. Details of compensation levied for delay, if any	
7. Initial Value of the Contract (*)	
8. Value of the contract Executed	

This certificate confirms that the work described in the above mentioned has been completed on DD-MM-YYYY in accordance with the specification, standards and conditions prescribed under the contract.

[The above information shall be supported with copies of Letter of Award, Work order, Project Completion Certificates]

Form ACK

Acknowledgement of Compliance with Guidelines for Procurement under Japanese ODA Loans

A) I, [insert name and position of authorized signatory], being duly authorized by [insert name of Applicant/members of joint venture ("JV")] (hereinafter referred to as the "Applicant") to execute this Acknowledgement of Compliance with Guidelines for Procurement under Japanese ODA Loans, hereby certify on behalf of the Applicant and myself that all information provided in the Application submitted by the Applicant for [insert Loan No and name of the Project] is true, correct and accurate to the best of the Applicant's and my knowledge and belief. I further certify, on behalf of the Applicant, that:

- (i) the Application has been prepared and submitted in full compliance with the terms and conditions set forth in the Guidelines for Procurement under Japanese ODA Loans (hereinafter referred to as the "Guidelines"); and
- (ii) the Applicant has not, directly or indirectly, taken any action which is or constitutes a corrupt, fraudulent, collusive or coercive act or practice in violation of the Guidelines and is not subject to any conflict of interest as stipulated in the relevant section of the Guidelines.

<If debarment for more than one year by the World Bank Group is NOT imposed, use the following sentence

B) >

B) I certify that the Applicant has NOT been debarred by the World Bank Group for more than one year since the commencement of the advertisement for prequalification.

<If debarment for more than one year by the World Bank Group has been imposed BUT three (3) years have passed since the date of such debarment decision, use the following sentence B').>

B') I certify that the Applicant has been debarred by the World Bank Group for a period more than one year BUT that on the date of issuance of Invitation for Bids at least three (3) years had passed since the date of such debarment decision. Details of the debarment are as follows:

name of the debarred firm	starting date of debarment	ending date of debarment	reason for debarment

- C) I certify that the Applicant will not enter into a subcontract with a firm which has been debarred by the World Bank Group for a period more than one year, unless on the date of the subcontract at least three (3) years have passed since the date of such debarment decision.
- D) I certify, on behalf of the Applicant, that if selected to undertake services in connection with the contract, the Applicant shall carry out such services in continuing compliance with the terms and conditions of the Guidelines.

E) I further certify, on behalf of the Applicant, that if the Applicant is requested, directly or indirectly, to engage in any corrupt or fraudulent action under any applicable law, such as the payment of a rebate, at any time during a process of public procurement, negotiations, execution or implementation of contract (including amendment thereof), the Applicant shall report all relevant facts regarding such request to the relevant section in JICA (details of which are specified below) in a timely manner.

JICA's information desk on fraud and corruption (A report can be made to either of the offices identified below.)

(1) JICA Headquarters: Legal Affairs Division, General Affairs Department

URL: https://www2.jica.go.jp/en/odainfo/index.php

Tel: +81 (0)3 5226 8850

(2) JICA India office

Japan International Cooperation Agency (JICA), JICA India Office, 2nd Floor, Dr Gopal Das Bhawan, 28, Barakhamba Road, New Delhi-110 001

Tel: +91-11-47685500 Fax: +91-11-47685555

The Applicant acknowledges and agrees that the reporting obligation stated above shall NOT in any way affect the Applicant's responsibilities, obligations or rights, under relevant laws, regulations, contracts, guidelines or otherwise, to disclose or report such request or other information to any other person(s) or to take any other action, required to or allowed to, be taken by the Applicant. The Applicant further acknowledges and agrees that JICA is not involved in or responsible for the procurement process in any way.

F) If any of the statements made herein is subsequently proven to be untrue or incorrect based on facts subsequently determined, or if any of the warranties or covenants made herein is not complied with, the Applicant will accept, comply with, and not object to any remedies taken by the Employer and any sanctions imposed by or actions taken by JICA.

Authorized Signatory
[Insert name of signatory; title]

For and on behalf of [Insert name of the Applicant] Date:

Section V. Eligible Source Countries of Japanese ODA Loans

[All countries and Areas]

PART 2 – Works Requirements

Section VI. Scope of Works

Contents

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3. Site and other data	17

1. Description of the Works

1.0 General

Salient details of the work for which pre-qualification applications are invited are as under:

Package 3(A)

Name of Work: "Construction of Knowledge Center, Research Center Complex, Technology Incubation Park, Sports & Cultural Complex, International Guest House, Convention Center & Academic Quad-1 including Chemistry Building, Material Science & Metallurgical Engineering Building, Bio technology & Bio Medical Engineering Building including all Infrastructure Facilities for the campus development of IIT Hyderabad at Kandi, Sangareddy District, Telangana".

1.1 About the Project

IIT Hyderabad started functioning from August 2008 from its temporary campus located in Sangareddy district. IIT Hyderabad wishes to make a dream campus, a campus that is built on state-of-the-art professional strategies of planning, architecture, design and construction, with equal emphasis on aesthetics, safety and comfort. It must stand befitting the status of a premier institute, offering a role model for other campuses to emulate. The infrastructure of the campus shall be so developed that it allows natural opportunities for interaction between academics of different disciplines to come together and undertake research on cutting edge interdisciplinary domains.

IIT Hyderabad is planned as a residential campus built on an area of 576 acres to eventually accommodate a total population of 30,000, including 20,000 students with a total built up area of 2.1 million square meters. The campus consists of academic area, residential area for students, residential area for faculty and staff and other support facilities.

The growth of the campus is planned in phases with a corresponding increase in the physical infrastructure and support facilities to accommodate an increase in the number of students in established programs and new programs of the future. IIT Hyderabad campus is envisioned as township that will be self-contained and based on concepts of sustainable development and living.

The master plan for IIT Hyderabad campus has been developed with modular flexibility for expansion to accommodate the future growth.

Campus construction has already started in January 2012 and is expected to be completed. Now IIT intends to start the construction activities for additional buildings development and appoint of the contractor for the same. This prequalification application is to pre-qualify the contractors for the construction activity of additional building development.

1.2 Scope of Work

The proposed scope of work shall include Civil Construction works, Internal & External water supply and sanitary works, Fire Fighting works, Internal Roads, Storm Water Drains, Rain Water Harvesting, Internal & External Electrical Works, HVAC, and Development works etc. for the following buildings.

Package 3(A):

- 1. International Guest House
- 2. Sports & Cultural Complex
- 3. Technology Incubation Park
- 4. Knowledge Centre
- 5. Research Centre Complex
- 6. Convention Centre
- 7. Academic Quad-1 including
- Chemistry Building,
- Material Science & Metallurgical Engineering Building,
- Bio technology & Bio Medical Engineering Building

The scope shall also include as prescribed:

- Design, Supply and Commissioning of MEP system.
- Supply of spares as required, special tools, special test and diagnostic equipment and special training equipment as prescribed.
- Provision of all the documentation and support material associated with the operation and maintenance.

- Comprehensive Maintenance, Technical support, Defect Liability coverage. Training
 of engineers, operations and maintenance staff including providing the training
 materials, training kits and demonstration equipment.
- Liaison with appropriate statutory authorities.
- The detailed scope of work including vital terms & specific period shall be included in the tender document.

1.3 Building Description [Package 3(A)]:

International Guest House (IGH):

Approximate built up area is 29,758 sq. m which has 200 guest rooms. Surroundings: 10,570 sq. mts. and consists of landscaped areas and an artificial lake (water retention pond) of 13,625 sq. mts. . Major features of GH are as follows.

- G + 5 building at the edge of 4.7 mts. deep water retention basin.
- All floors are different & corridors are staggered in plan
- Upper floor rooms are cantilevered by span up to 5.0 mts.
- Precast concrete panels are used at all floors in combination of solid panels and partly glazed panels.
- Combination of exposed concrete finish & plaster and painted surfaces.

Sports and Cultural Complex (SnCC):

Approximate built up area is 30,891 sq. mts., which includes three main arenas: swimming pool, outdoor theatre, and Cultural facilities.

The sports complex comprises indoor sports courts, locker rooms, sauna facility and indoor games facilities. External Development: 82,200 sq. mts. and comprises 400m track & athletic field with a soccer field, Cricket field and a basketball court. Major features of SnCC are as follows.

Amphitheatre of 5,190 sq. mts and Swimming Pools of size 22.50mx50m and 22.5mx10m

- G+1 structure with exposed concrete folded plate roofs of span varying from 35 to 49 m.
- Extensive external & internal structural glazing in full folded plate spans.
- Internal walls in fair faced precast concrete designer blocks in combination of solid and glazed blocks.

 Complex roof construction consisting of doubly curved concrete shell roof of up to 45 meter span. Open Air Amphitheatre with 6mt Cantilever Pergolas in steel & aluminum combination.

Technology Incubation Park (TIP):

Approximate built-up area is 15,014 sq. m. To provide an incubation center intended to provide space for startups consisting of large re-configurable spaces and provisions for including wet and dry labs. Major features of TIP are as follows.

- Laboratory complex comprising of 7 different sized square footprint blocks interconnected with covered corridors.
- Entrance & Courtyard canopies in combination of Glass & Steel.
- Floors with cantilevered slabs spanning from 0.6mt to 1.5mt.
- Internal Courtyard with Tensile structure.
- All internal corridors with Steel columns.
- Combination of exposed concrete finishes & painted plaster surfaces.

Knowledge Centre (KC):

Approximate built-up area is 9,111 sq. m. modelled as a library with large digital collection, multi-media rooms and digital archives. Major features of KC are as follows.

- G + 3 square building footprint with fair faced exposed concrete parabolic arches.
- Large central atrium with a height of 22.30 mts in fair faced exposed concrete
- Complex roof construction consisting of central square surrounded by 4 no. Hyperbolic paraboloid shell roof.
- External dry-stone cladding up to a height of 11.0 mts.
- Combination of Exposed concrete & plaster surfaces.

Research Centre Complex (RCC):

Approximate built-up area is 11,812 sq. mts. including wet and dry labs and facilities such as clean rooms and other sophisticated high-end research equipment. Major features of RCC are as follows.

- G + 4 Laboratory structure with a Parabolic/Egg shaped footprint.
- Precast concrete elements at upper floors lift lobby in curved profile footprint.
- Central full height material loading-unloading dock.

• Upper floors with peripheral balconies with provision of decks for material movement.

Convention Centre (CC):

Approximate built-up area is 15,393 sq. mts. with facilities for hosting events including seminar halls, conference rooms and public gathering spaces. Major features of CC are as follows.

- Roof canopies with cantilever of span between 2.0 mts and 10.0 mts
- Maximum span of 24.0 mts. in main auditorium
- Tensile fabric structure as sun screen.
- Multi level auditoriums with inclined false ceilings & skylights.
- Open to sky courtyard with combination of openable folded glass façade & concrete precast panels.

Academic Quad-01(AD1):

AD-1 consist of following three buildings.

- 1. Chemistry Building, (10063.19 Sqm)
- 2. Material Science & Metallurgical Engineering Building. (5997.41 Sqm)
- 3. Bio Technology & Bio Medical Engineering Building. (8552.80 Sqm.)

The Bio-Tech building to be designed for Classrooms, Dry Teaching Laboratory, Wet Teaching Laboratories, Research Laboratories, Computer Labs, Equipment and Cold room, Reception and Administration, Conference Rooms, Office space, Pantry, Receiving / storage room and service areas.

Chemistry building to be designed for Classroom with different capacity – Discussion based & AV equipped – futuristic approach. Experimental Research Lab, Computer Research Lab, Common Instrument Lab, Organic, Inorganic, Physical Chemistry Lab, Dry Ice Room, Reception and Administration, Conference Rooms, Office space, Exhibition hall, Workshop, Pantry and Service areas.

Material Science & Metallurgical Engineering Building to be designed with Corridor facing atrium. Separate block of classrooms with Amphitheater above. Each Module / Laboratory unit has a service shaft connection to take care of intensive services.

Major features of AD1 buildings are as follows.

- Curvilinear Shape of Buildings
- Organic design of entrance porch with tapered columns & shear wall

- Exposed concrete façade
- Exposed precast panels for external façade.
- Concrete cement jali as external façade feature.

Infrastructure Works:

Infrastructure works consist of development of internal road networks, water supply, Storm water network, sewer lines, Firefighting system, Landscaping, Hardscape, street lighting and Utility Buildings.

The following are the buildings as part of Infrastructure development.

```
1.Electrical substation – ESS 03, (432.29 Sqm)
```

2.Electrical substation – ESS 6A, (432.29 Sqm)

3.Electrical substation – ESS 11, (432.29 Sqm)

4.Electrical substation – ESS 4B2,(349.15 Sqm)

5.Electrical substation – ESS 05, (686.63 Sqm)

6.HVAC plant room-AC plant 04, (2400 Sqm)

7.HVAC plant room-AC plant 04, (2685.06 Sqm)

1.4 MEP system description - Buildings:

Plumbing works:

a) Domestic & Recycled Water Supply:

- Domestic water and Recycled water will be supplied from the central infrastructure facilities to the buildings through two discrete pipelines. Domestic water would be stored in UGT (post supply to the firefighting Static Water UGT) and transferred to the OHT by use of Transfer Pumps (submersible mono block pumps / surface mounted mono block pumps).
- The Recycled water will be connected to the UGT, and then pumped to OHT. Water distribution for upper 2-3 floors by hydro pneumatic, lower floors by gravity system. Proposed material for water supply would be CPVC.

b) Hot Water Supply:

 The hot water will be generated by use of Solar HWG, Heat Pump HWS, Conductive Electrical Geysers, or a combination of either of these depending on the usage of the building.

c) Sewer Systems:

- A combined sewer system will be used for the drainage of waste water and grey water.
 The waste water and grey water sewers will be separate within the building and will converge outside the building and connect to main sewer network. Grease traps will be installed in sewers from the kitchens.
- Waste water from labs are connected to a dedicated ETP proposed in the basement of chemistry building. After the pretreatment the waste water will be connected to main sewer network.

UPVC & CI pipe for all internal drainage, laboratory waste water PP pipes.

d) Rain Water Systems:

Rainwater falling on the building roofs will be transferred to the ground level by vertical
rain water pipes in shafts. The Storm water will be collected by gravity through catch
basin, storm water manhole and RCC pipe and shall be ultimately connected to the main
storm-water drainage system. Piping material shall be uPVC.

e) Sanitary Equipment:

 Sanitary equipment would be in line with the GRIHA guidelines with low or restricted flow fixtures for all buildings except Guest House building where it is as per the final selection of the architect.

Firefighting:

- Firefighting system is connected through dedicated underground fire-water tank, fire pump room & fire overhead water tank based on each building classification as per NBC-2016.
 OHTs are provided with booster pumps of required capacity with down comer system as per NBC-2016 requirement.
- All firefighting riser / shaft are connected through peripheral pipes coming from the fire

- pump room. Fire water pumps shall take care of required flow & pressure to each firefighting equipment.
- Sprinkler system is connected to Hydrant Riser / Separate Sprinkler riser with required fittings. External yard hydrants shall also be required. Fire extinguishers are selected & placed as per relevant IS standards.
- Gas based flooding system for Firefighting system.

HVAC:

- The air conditioning system will be provided using chilled water tap off from central chilled water plant & further low side system starting from chilled water tap off point at each building to distribution in all building's air handlers e.g. AHUs, FCUs, TFAs etc. The air distribution from these air handlers shall be done using insulated ducting & air outlets e.g. grilles, diffusers etc.
- The air conditioning for the clean room shall be provided using AHUs with HEPA filters and maintain positive pressure in the rooms.
- Radiant type air conditioning systems will be provided in reading rooms & entrance lobby in Knowledge Centre building.
- LV rooms such as CCTV room, BMS rooms, fire alarm room & UPS room shall be provided with standalone split AC units with standby unit controlled by PLC to facilitate 24x7 air conditioning.
- The labs shall be provided with fume cupboards which shall be connected to scrubber exhaust system using glass lined ducting having resistance against acids / chemicals.
- These scrubbers will be provided with variable frequency drives to modulate the scrubber fan speed as per the fume hoods operation by sensing the pressure in the ducts.TFA units shall be provided for makeup of the exhaust air and shall modulate its speed in synchronous with the scrubber fan speed.

- The labs shall be provided with general exhaust @ 2 air charges per hour to remove general fumes / smell from the labs.
- Toilets shall be exhausted using each toilet ducts connected to vertical ducts in shaft which shall be connected to exhaust fan on terrace.

Electrical:

- Normal & Emergency supply is coming from nearby ESS Substation. Normal & Emergency main LT panels shall be located in the ground floor of respective buildings and further it will be distributed to the loads using the sub distribution boards. All the panels rated 1000A & above shall be IEC61439 complied.
- Dedicated UPS with 15 minutes battery back up shall be provided for each building. All critical loads shall be connected to the UPS distribution boards.
- LED lighting shall be used for lighting system. Motion sensors & Day light sensors shall be used wherever required. All embedded conduit shall be Heavy duty PVC type and exposed conduits shall be MS type.
- Earthing system shall be considered as per IS3043. All earth pits shall be with copper. All treated earth pits shall be with conventional type. Chemical earth pit shall not be used. Structural lightning protection system shall be used for all the buildings.
- All LT power cable shall be XLPE insulated with FRLS properties. Control cables shall be PVC insulated.
- Modular switches and sockets shall be used all sockets shall be universal type with shutters for safety.
- For power cables ladder type cable trays shall be used and for control & instrumentation cables perforated cables shall be used. Raceways & conduits shall be used wherever required

ELV:

a) ICT (Data/Voice) Infrastructure & Wifi Enabling – Information & Communication Technology Infrastructure - Passive Components

- Standards based and Open Architecture
- Provision of LAN IO and Telephone IO (suitable for Analog & IP Phones) as per occupant in office/workstation as required
- Provision of Wireless (Wi-Fi) Enabling as per requirement.
- Structured cabling with Horizontal Cat 6A Copper cables & Vertical OS2 Single mode
 Fiber optic backbone cables for the indoor areas of building.
- Each building has its own Server room & ELV room. Provision for OFC Connectivity to outside to be made in individual building ELV racks.
- b) Electronic Security- CCTV Surveillance System Infrastructure- Passive Components
 - IP based CCTV Surveillance system infrastructure with building wise monitoring at present & central monitoring in future Only Cabling infrastructure.
 - Provision of CCTV IO as per the requirement
 - Structured cabling with Horizontal Cat 6A Copper cables & Vertical OS2 Single mode
 Fiber optic backbone cables for the indoor areas of building.
 - Provision for OFC Connectivity to outside to be made in individual building ELV racks.
- c) Safety To Human Life And Assets Fire Detection & Alarm System (Fas)
 - Addressable fire detection and alarm system (UL/CE Listed) for all areas
 - GUI based configuration and operation
 - Hardwired integration with HVAC fire dampers, Exhaust fans, PA system & Access Control system
- d) Public Address And Emergency Communication System
 - Intelligent Digital communication, Ethernet/IP based controllers

- GUI based configuration and operation with building wise operation at present & centralized in future.
- Integration with station fire detection and alarm system.
- Provision for OFC Connectivity to outside to be made in individual building ELV racks.
- e) Access Control System Infrastructure Passive Components
 - Smart Card & Biometric based Access control system Infrastructure based on the requirement for different rooms – Only Cabling Infrastructure
 - Copper cabling from readers/EM locks/exit switches to Door controller
 - Wireless connectivity from door controller to Master Access Controller
- f) Integration Integrated Building Management System (IBMS)
 - IBMS shall bring various systems, services and utilities together so that they can be
 monitored and controlled from a central location with building wise monitoring at
 present & centralized monitoring in future.
 - GUI based configuration and operation
 - IBMS shall integrate equipment of various systems like HVAC, Electrical, Fire Fighting, Plumbing using DDC controllers and ELV systems such as Fire Detection and Evacuation on open, interoperable communication platform.
 - Provision for OFC Connectivity to outside to be made in individual building ELV racks.

g) Television Cabling & Infrastructure

- To provide Television infrastructure for the occupants to use TV services from single or multiple service providers.
- Receiver for DTH/Cable TV system shall be installed by the provider such that
 individual receiver antennae are not required for every building or user. The
 distribution shall be from terrace where service provider will set up their equipment.
 The vertical cabling for the above shall be commissioned by the service provider
 themselves.

Horizontal cabling to each TV location is in the scope of contractor/integrator. TV sockets and RG6/RG11 cabling shall be provided by integrator.

1.5 MEP system description- Infrastructure:

HVAC:

- The institute has five zones, namely the academic Zone, the Hostel Zone, the Residential Zone (Faculty and Staff Member), the Commercial Zone and the Recreational Sports Zone. The main objective of air-conditioning is to provide comfort to all areas of the campus in a cost effective manner.
- Total normal air conditioning load for all buildings is 8000TR, total radiant cooling load is around 1500TR.
- To cater this need five central chiller plants will come up located at different places
 within the campus boundary constructed over four phases of campus construction. Each
 central plant will have chillers, primary & secondary pumps of required capacity with
 standby.
- All the equipment will run under grid supply along with DG supply for critical areas of the campus buildings.
- Chilled water will be supplied to each building and tapped at one point with an isolation and balancing valve with residual pressure of 23 M and chilled water inlet temp of 44.5 Deg F.
- Individual buildings will make arrangement for distribution of chilled water within building. All the central plants will be monitored using chiller plant manager which will be integrated to Building Management System of the campus.

Electrical:

- Additional 33/11kV, 6.3 MVA transformers & 2000kVA HT DG sets shall be augmented in the main receiving station to cater the phase-II requirement.
- All the ESS will be getting the feed from the main receiving station. All the ESS will be connected in ring form by 11kV cables.
- Every building will have dedicated normal & emergency panel which will get feed

- from the ESS. All the panels rated 1000A & above shall be IEC61439 complied.
- LED lighting shall be used for lighting system of substation. All embedded conduit shall be Heavy duty PVC type and exposed conduits shall be MS type. Pole mounted street light shall be used for street lighting application.
- Earthing system shall be considered as per IS3043. All earth pits shall be with copper.
 All treated earth pits shall be with conventional type. Chemical earth pit shall not be used.
- Conventional lightning protection system shall be used for all service buildings.
- All HT & LT power cable shall be XLPE insulated with FRLS properties.HT cable shall be with screening. Control cables shall be PVC insulated.
- Modular switches and sockets shall be used all sockets shall be universal type with shutters for safety.
- For power cables ladder type cable trays shall be used and for control & instrumentation cables perforated cables shall be used. Raceways & conduits shall be used wherever required.
- For external cable routing, cable trenches and Hume pipes shall be used.

2. Construction Period

The tentative construction period is Twenty (36) months.

The detailed key dates will be described in the Tender documents.

3. Site and Other Data

3.1 General:

The works are situated at permanent campus site of IIT Hyderabad on a 576 acre plot abutting NH-9 at Kandi village, Sangareddy District, Telangana.

3.2 IITH Campus Profile & Climate

A micro study of the campus topography shows system of strong natural surface run off towards the regional level lakes within 3 Km of site. Type of soil is red soil with occasional black cotton soil & rocky outcrop. The average maximum temperature is approximately 28 degrees Celsius and the average minimum temperature is approximately 17 degrees Celsius. Highest temperature will experience from May to July. There is a drastic change in Relative humidity between May & June months it changes from 28 to 51. Wind Speed is higher when the temperature are high& it ranges between 11to 22 km/h.

3.3 Topography of the site

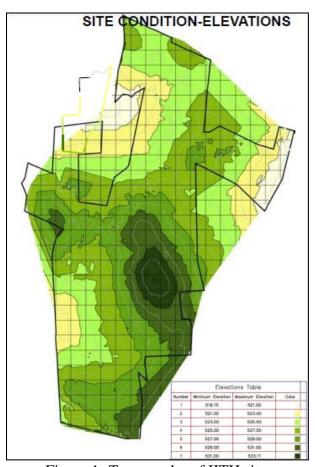


Figure 1- Topography of IITH site

3.4 Vegetation at Site

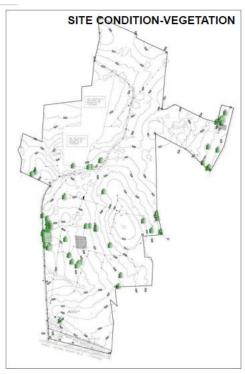


Figure 3- Vegetation at site

3.5 Project layout



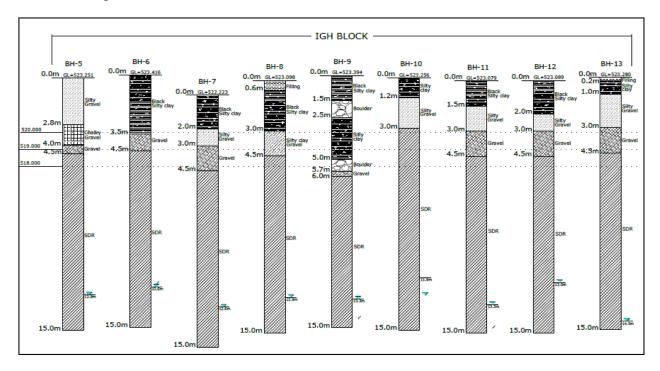
Figure 2- IITH project layout

3.6 Salient Features of the Project

- The unique design challenge in 570Acres land
- Master plan is designed for future expansion also
- Total campus will be built in phases
- Campus can occupy 40000 residents and 20000 students
- Campus planned and designed for
 - > Education and research
 - ➤ Neighbourhood to students
 - Neighbourhood to families
 - > Community centres and public buildings
 - > Recreation and sports

3.7 Bore Logs of Buildings

Typical soil investigation report of IGH building is provided as below. Further details will be provided in tender document.



3.8 Other Information

a. Access to site

Site is easily accessible from NH-9. Site location is given in figure below. Further details will be provided in tender document.

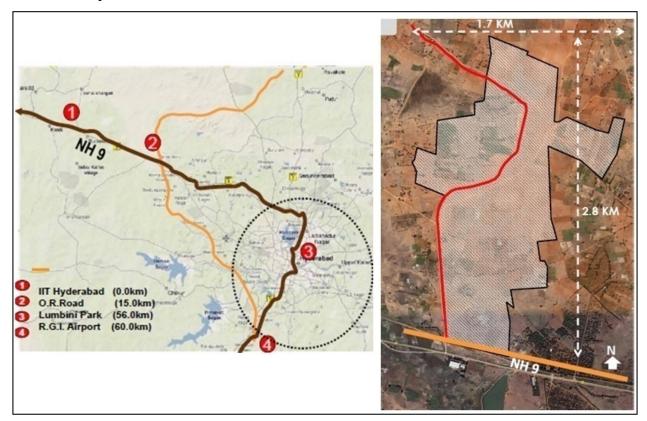


Figure 3- Site location

- Transportation, communications facilities and medical facilities
 The Contractor shall procure transportation, communications facilities and medical facilities at his own responsibility.
- c. Land provided by the Employer

 NIL.

Section VI. Scope of Works

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Japan International Cooperation Agency

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