## PREQUALIFICATION DOCUMENTS

#### for

# **Procurement of**

Construction of Lecture Hall Complex, Students' Commons, Core Laboratories, Administration Building, School for Campus Residents, Hospital, Hostels for Students, Shopping Center, Academic Quad -2 (Electrical Engg. & Computer Science and Engineering building) and Academic Quad 3 (Mathematics, Physics and Liberal Arts building) for the campus development of IIT Hyderabad at Kandi, Sangareddy District, Telangana.

## Package 3B

# Employer: Indian Institute of Technology HyderabadCountry: Republic of IndiaProject: Campus development Project of IIT Hyderabad

**Loan No.:** ID P-227/234

#### **Table of Contents**

Invitation for Prequalification	IFP-1
PART 1 – Prequalification Procedures	
Section I. Instructions to Applicants	ITA-1
Section II. Prequalification Data Sheet	PDS-1
Section III. Qualification Criteria and Requirements	QCR-1
Section IV. Application Forms	AF-1
Section V. Eligible Source Countries of Japanese ODA Loans	ESC-1
PART 2 – Works Requirements	
Section VI. Scope of Works	SOW-1

**Invitation for Prequalification** 

#### Form of Invitation for Prequalification

Date: 05-02-2018 Loan Agreement NO: *ID P-227/234 IITH/JICA/PQ-3B* 

- 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.
- The Indian Institute of Technology Hyderabad intends to prequalify contractors and/or firms for Package 3 (B) "Construction of Lecture Hall Complex, Students' Commons, Academic Quads -2 and 3 (Electrical Engg. & Computer Science and Engineering building, Mathematics, Physics and Liberal Arts building), Core Laboratories, Administration Building, School for the Campus Residents, Hospital, Hostels for Students, Shopping Center'.

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.
- 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(B)'

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: <u>secivil@iith.ac.in</u>

# **PART 1 – Prequalification Procedures**

# **Section I. Instructions to Applicants**

## **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. Prequalification Data Sheet

	A. General
ITA 1.1	The number of the Invitation for Prequalification is: <i>IITH/JICA/PQ-3A</i>
ITA 1.1	The Employer is: Indian Institute of Technology Hyderabad
ITA 1.1	The name, identification, and number of the lot(s) (contract(s)) are: Construction of Lecture Hall Complex, Students' Commons, Academic Quads -2 and 3 (Electrical Engg. & Computer Science and Engineering building, Mathematics, Physics and Liberal Arts building), Core Laboratories, Administration Building, School for Campus Residents, Hospital, Hostels for Students, Shopping Center for the campus development of IIT Hyderabad at Kandi, Sangareddy District, Telangana, India.
ITA 2.1	The name of the Borrower is: Government of India
ITA 2.1	The number of the Loan Agreement is: <i>ID P-227/234</i>
	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 are 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: <u>www.worldbank.org/debarr</u>
ITA 4.1	An applicant shall be either:
	a) An Indian Company incorporated under Companies Act 2013
	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 of lead 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

## **Prequalification Data Sheet**

	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 Account Number. 30454644537 (Current Account) Name of the Bank: State Bank of India Address of the Bank. HIT Kandi, IIT Hyderabad Campus, Kandi, Sangareddy, Telangana - 502285Branch code: 14182IFSC code: SBIN0014182MICR code: 502002528SHIFT code: SBININBB762
ITA 6.1	For <u>clarification purposes</u> only, the Employer's address is:
	Attention:K S Ravindra Babu, Superintending EngineerStreet Address:Indian Institute of Technology Hyderabad Kandi, Sangareddy District, Telangana, City: Hyderabad ZIP Code: 502 285Country:IndiaTelephone: +91-40- 2301 7202; +91-40-2301 7222Facsimile number: +91-40-2301 6032Electronic mail address:secivil@iith.ac.in
ITA 6.1 & 7.2	<ul> <li>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.</li> <li>All responses to request for clarification, if any, will be published on the Employer's web page.</li> <li><u>http://www.iith.ac.in/index.php/tenders-notices</u></li> </ul>
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: <i>English</i>
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/Loss Status:
	<ul> <li>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 of origin.</li> </ul>
	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
	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: KS 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> <i>Institute of Technology Hyderabad, Kandi, Sangareddy District, 502 285,</i> <i>Telangana ,India</i>
	E. Procedures for Evaluation of Applications
F. Evalu	ation 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

## **Table of Contents**

1. Eligibility	. 2
2. Historical Contract Non-Performance	. 2
3. Financial Situation	. 3
4. Experience	. 4

	Eligibility a	ity and Qualification Criteria Requirement		<b>^</b>	Requirements Joint Venture (existing or intended	d)	DocumentationSubmission
No. Fact	tor		Single Entity	All Parties Combined	Each Member	One Member	Requirements
1. Eligibili	ity						
1.1 Nationalit	ty	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 o Interest	ſ	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 Inel	ligibility	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. Historic	cal Co	ntract Non-Performance					
2.1 History of Performir Contracts	ng	Non-performance of a contract <sup>(i)</sup> did not occur as a result of contractor's default since 1 <sup>st</sup> January 2015.	Must meet requirement <sup>(ii)</sup>	N/A	Must meet requirement <sup>(ii)</sup>	N/A	Form CON – 2
2.2 Pending Litigation	l	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 <sup>(ii)</sup>	N/A	Must meet requirement <sup>(ii)</sup>	N/A	Form CON – 2
2.3 Litigation History	1	No consistent history of court/arbitral award decisions <sup>(iv)</sup> against the Applicant <sup>(iii)</sup> since 1 <sup>st</sup> January 2013.	Must meet requirement <sup>(ii)</sup>	N/A	Must meet requirement <sup>(ii)</sup>	N/A	Form CON – 2
Notes for the App (i) Non-perform		decided by the Employer, shall include all c	contracts				<u> </u>

(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
				(	Submission		
No. Factor	Requirement	Single Entity	All Parties Combined	Each Member	One Member	Requirements	
	(b) that were so challe	nged but fully settled against the contractor.					
	information on fully respective contract an	Il not include contracts where Employer's d settled disputes or litigation, i.e. dispute or d where all appeal instances available to the	litigation that has Applicant have bee	been resolved in a n exhausted.			
( <b>ii</b> )	This requirement also	applies to contracts executed by the Applic	ant as a JV member	ſ.			
(iii)		provide accurate information on the related A ver the last five (5) years. A consistent histor					
	The occurrence of on a cause for rejection.	e (1) or two (2) adverse cases over five (5) y	ears for a Contracto	or handling, on aver	rage, ten (10) similar	contracts simultane	cously, should not be
<b>J</b> • 1		The audited balance sheets or, if not					

3.1	Financial Performance	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 <sup>(i)</sup> (ii)	N/A	Must meet requirement	N/A	Form FIN – 3.1 including Bid Capacity <sup>(vii)</sup> workout and value of balance Jobs in

	Eligibility	and Qualification Criteria		Compliance Requirements			Documentation
		Requirement		Joint Venture (existing or intended)			
No.	Factor		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 <sup>i</sup> .	Must meet requirement <sup>(i) (vi)</sup>	Must meet requirement	Must meet 25% of requirement.	Must meet 40% of requirement.	Form FIN – 3.2
Infras	ing Sector project mean: tructure works will not Experience General	s, Civil, Architectural, Plumbing, Electrical, Fire be considered. Experience under construction contracts	Fighting, HVAC work	xs involved in Comm	Must meet	l Residential sectors or	ıly. Industrial, Form EXP – 4.1
4.1	General Construction Experience	Experience under construction contracts in the role of prime contractor (single entity or JV member), or subcontractor, <sup>(i)</sup> for at least the last 05 years, starting 1 <sup>st</sup> 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 <sup>ii, ix</sup> that have been satisfactorily and substantially <sup>iii</sup> between 1 <sup>st</sup> January 2007 and Application submission deadline. <sup>xi</sup>	Must meet a minimum of One work of Rs 600 Crores OR Two of Rs. 480 Crores OR Three of Rs. 240 Crores <sup>(i)</sup>	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 <sup>(iv)</sup>	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 member), or subcontractor <sup>(vi)</sup> between	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		Documentation
				Joint Venture			
No.	Factor	Requirement	Single Entity		(existing or intended	d)	Submission
100	T uctor		Single Energy	All Parties Combined	Each Member	One Member	Requirements
		<ul> <li>1<sup>st</sup> January 2007 and Application submission deadline, a minimum construction experience in the following key activities successfully completed (viii) (vii)</li> <li>Concrete Volume - 1,00,000m<sup>3</sup> in one project</li> <li>Structural Steel - 550 MT in one project</li> <li>Structural Glazing - 13,500 m<sup>2</sup> in one project</li> <li>Form Finish Concrete - 5000 m<sup>2</sup></li> <li>Post Tension Slabs - 2000 m<sup>2</sup> in one project</li> <li>District cooling system with plant capacity not less than 2000 TR across two projects.</li> <li>\{viii\) (ix)</li> </ul>					
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.

(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.

(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

	Eligibility :	and Qualification Criteria		Compliance	Requirements		Documentation	
	Factor Requirement		Joint Venture (existing or intended)		d)	Submission		
No.		Requirement	Single Entity	All Parties Combined	Each Member	One Member	Requirements	
	of number of small v	alue contracts (less than the value specif	ied under requirement)	to meet the overall	requirement will not	t be accepted.		
(iii)	Substantial completion	on shall be based on 80% or more of the	works completed under	the contract.				
(iv)	v) 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)	(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 requirement.	which the Applicant participated as a .	JV member or subcont	tractor, only the A	pplicant's share, by	value, shall be con	nsidered to meet this	
(vii)	production shall be th	ate of production of any key activity can be annual production rate for the key con ears during the period should be specifie	struction activity (or ac					
(viii)	The minimum experi	ence requirement for multiple contracts	will be the sum of the n	ninimum requireme	ents for respective in	dividual contracts.		
(ix)		ect means, Civil, Architectural, Plumbing structure works will not be considered.	g, Electrical, Fire Fighti	ng, HVAC works i	nvolved in Commerc	cial, Educational and	l Residential sectors	
(x)	Lead member of JV	nust meet the requirement.						
(xi)	i) 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)		tandalone International Company or International Company or International Company or International Company of	ernational company wit	h Indian Subsidiary	y or any Indian Com	pany that fulfills the	qualification	
(xiii)	For an International of	company associated with its Indian subsi	diary, the International	company and India	an subsidiary shall m	eet requirement.		

# **Section IV. Application Forms**

## **Table of Forms**

Application Submission Form	Error! Bookmark not defined.
Form ELI -1.1 Applicant Information Form	Error! Bookmark not defined.
Form ELI -1.2 Applicant's Party Information Form	Error! Bookmark not defined.
Form CON - 2 Historical Contract Non-Performance	Error! Bookmark not defined.
Form FIN - 3.1 Financial Situation	Error! Bookmark not defined.
Form FIN - 3.2 Average Annual Construction Turnover	Error! Bookmark not defined.
Form EXP - 4.1 General Construction Experience	Error! Bookmark not defined.
Form EXP - 4.1(a) Completion Certificate from Client	Error! Bookmark not defined.
Form EXP - 4.2(a) Specific Construction Experience	Error! Bookmark not defined.
Form EXP - 4.2 (a1) Specific Construction Performance Certific	cate15
Form EXP - 4.2(b1) Specific Construction Experience in Key	Activities Error! Bookmark not
defined.	
Form EXP - 4.2 (b2) Client Certificate(s) for Key Activities liste	ed in 4.2 (b)19
Form EXP - 4.2(c1) Financial Details of Completed Building Pr	ojects Error! Bookmark not
defined.	
Form ACK Acknowledgement of Compliance with Guidelines f	

## **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 <sup>st</sup> January <i>[insert year]</i> , in accordance with Section III, Qualification Criteria and Requirements, Sub-Factor 2.1.			
	□ Contract(s) not performed since 1 <sup>st</sup> January <i>[insert year]</i> 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] Address of Employer: [insert street/city/country] Reason(s) for non performance: [indicate main reason(s)]	[insert amount]	

#### 2. Pending Litigation

	Pending Litigation			
	□ No pending litigation in accordance with Section III, Qualification Criteria and Requirements, Sub-Factor 2.2.			
		on in accordances indicated bel	e with Section III, Qualification Criteria an ow.	d Requirements,
Year of dispute	Amount in dispute	Outcome as Percentage of Net Worth	Contract Identification	Total Contract Amount (current value, currency, exchange rate and USD equivalent)
[insert year]	[insert amount]	[insert percentage]	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 amount]

#### 3. Litigation History

Litigation History					
	□ No court/arbitral award decisions against the Applicant since 1 <sup>st</sup> January [insert year], in accordance with Section III, Qualification Criteria and Requirements, Sub-Factor 2.3.				
	bitral award decisions against the Applicant since 1 <sup>st</sup> January [insert tion III, Qualification Criteria and Requirements, Sub-Factor 2.3 as in				
Year of Contract Identification award		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	formation 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 Construction 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]

#### 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]

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.]

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 c	lay, month, year,	e.g., 15 June, 2015]		
Completion Date	[insert day	v, month, year, e.	g., 03 October, 2017]		
Role in Contract	Prime Contractor				
[check the appropriate box]	Sing	le entity □	JV member		
Total Contract Amount	and currency(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 [insert total		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]

\* 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	

AF-16	
-------	--

contractor.	
a. Technical Proficiency	Outstanding/ V.Good/ Good/ Poor
b. Financial Soundness	Outstanding/V.Good/Good/Poor
c. Mobilization of adequate T&P	Outstanding/V.Good/Good/Poor
d. Mobilization of manpower	Outstanding/V.Good/Good/Poor
e. General behaviour	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]

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 brief description of the Activity, emphasizing its specificity]

Total Quantity of Activity under the contract:

Contract with Similar Key Activities					
Item			Inf	ormation	
Contract Identification	[insert contract name and number, if applicable]				if applicable]
Award Date	[insert day, month, year, e.g., 15 June, 2015]				une, 2015]
Completion Date	[insert d	lay, mo	onth, ye	ar, e.g., 03 Oc	tober, 2017]
Role in Contract	Prime C	ontracto	or	Management	Subcontractor
[check the appropriate box]	Single entity	JV me	ember ⊐	Contractor	
Total Contract Amount	[insert total contract amount in local currency] USD [insert and total contract amount in USD [insert] = 2 and tot				
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)		Percentage Actua participation Quanti (ii) Perform		Actual Quantity Performed (i) x (ii)
Year 1					
Year 2					
Year 3					
Year 4					

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]

\* 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

[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. 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 <sup>(**)</sup> 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.

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

Multiplying factors for Cost Updating:

]

[The following table shall be filled-in and certified by the Owner / Client for each of the completed building projects listed above.]

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.)

 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, 2<sup>nd</sup> 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:

#### ESC-1

# Section V. Eligible Source Countries of Japanese ODA Loans

[All countries and Areas]

# **PART 2 – Works Requirements**

# **Section VI. Scope of Works**

# Contents

1. Description of the Works	
2. Construction Period	16
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(B)

**Name of Work**: "Construction of Lecture Hall Complex, Students' Commons, Academic Quads -2 and 3 including Electrical Engg. & Computer Science and Engineering building, Mathematics, Physics and Liberal Arts building, Core Laboratories, Administration Building, School for the Campus Residents, Hospital, Hostels for Students, Shopping Center 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(B):

- 1. Lecture Hall Complex,
- 2. Academic Quad -2 including
  - Electrical Engineering & Computer Science and Engineering building,
- 3. Academic Quad 3 include
  - Mathematics, Physics and Liberal Arts building,
- 4. Core Laboratories,
- 5. Administration Building
- 6. School for the Campus Residents
- 7. Hospital
- 8. Hostels for Students
- 9. Students' Commons
- 10. Shopping Centre

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(B)]:**

# **Lecture Hall Complex:**

The site for the Lecture Hall Complex is located centrally in the Master Plan for the IIT Hyderabad having a site area of 12050 sq.m. The Complex is a mix of 15 lecture halls of various seating capacities planned on two levels viz the lower ground floor and the upper ground floor. The average floor to floor height is 6 meters.

The total built up area of this Lecture Hall Complex is 15,763 sqm. The lower floor has a seating capacity of 2086 students while the upper floor has a seating for 1254 students. The cumulative seating capacity of the Complex is 3340 students. The lower floor encompasses a total of 8 lecture halls of following capacities ;

- 800 seater hall : 1 no.
- 400 seater hall : 1 no.
- 200 seater hall : 2 nos.
- 120 seater hall : 2 nos.
- 72 seater hall : 2 no.

The upper floor is comprised of 7 lecture halls of following capacities ;

- 400 seater hall : 1 no.
- 200 seater hall : 2 nos.
- 120 seater hall : 2 nos.
- 72 seater hall : 2 no.

All the halls are designed for educational purposes while the 800 seater "amphitheater" can act as a "stand-alone theater" until a large student body requires the hall/auditorium. It can also be used for drama and dance performances.

While the interiors of the Halls would be acoustically treated with appropriate sound absorption materials for ceiling, walls and flooring, the halls have been designed for acoustics considering both peak and off-peak capacities at any given time. The external finish for building is Textured Paint that adds to the aesthetics of the Complex and reduces the maintenance over the years. The Entrance Lobbies have granite flooring and all the fenestration is out of Anodized Aluminium with Heat strengthened glass.

#### **Computer science and Engineering Department Building:**

The site for the Computer Science Engineering building is located jointly with Electrical Engineering building in the Master Plan for the IIT Hyderabad having a combined site area of 14,375 sq.m. The Complex is a mix of labs, classrooms and faculty rooms. The complex is divided in two parts (i) larger block of Ground+4 structure which comprises mainly of labs and (ii) office block of Ground+6 structure which mainly comprises faculty offices.

The total built up area of the Computer Science Engineering building is 9129 sqm.

Structural system used is R.C.C. framed structure which comprises of conventional column, beam and slabs and Post-Tensioned Beams have been used in areas where the spans are large.

The external face of the building is a mix of Form Finished Concrete and Textured paint. The Lobbies will have Anti-Skid Vitrified tiles, while the classrooms and labs will have Concrete flooring with Non-metallic Hardener. All the fenestration will be out of Anodized Aluminium with Heat strengthened glass.

#### **Electrical Engineering Department building.**

The total built up area of the Electrical Engineering building is 10,553 sqm. All the functions are arranged based on the spatial requirement and the integrated structural system. The complex is divided in two parts (i) larger block of Ground+4 structure which comprises mainly of labs and (ii) office block of Ground+6 structure which mainly comprises faculty offices.

#### Maths, Physics and Liberal Arts Building:

The site for this building is located in the Master Plan for the IIT Hyderabad having a combined site area of 11,645 sq.m. The Complex is a mix of labs, classrooms and faculty rooms.

The complex is divided in two parts 1) Right wing- ground+4 structure which comprises mainly of labs, requires large clear spans and 2) Left wing - office block ground+4 structure which mainly comprises of faculty offices.

The total built up area of the Physics Department is 7611 sqm, that of Maths Department is 4827 sqm. Whereas the plinth area of Liberal Arts Department is 5146 sqm. This building also follows the same specifications of the CSE & Electrical Engineering building.

#### **Core Laboratories**

For laboratory building is a Ground plus 2 storeyed structure. Plinth are of the building is 2478 Sq.m approximately. The Core laboratories accommodate Physics and Chemistry labs and a mechanical workshop for basic engineering courses at the undergraduate level.

#### **Administration (Main) Building**

The Admin building is located in central part of IITH campus, adjacent to Knowledge Center & Convention Center. It is planned as an office building to accommodate approx 300 working staff including other facilities like Auditorium & dean's offices.

It is situated on a plot area of 7292 Sqm. The lower ground + Ground floor + 5 storey building with a height of about 33 m (30 M above ground ) covers a built up area of about 6380 sqm with a ground coverage about 1100 Sqm.

The Façade is characterized by vertical fin elements (ferro-cement/ concrete) with shading performance. The fins angles vary in two modes according to direction to reduce solar impact.

#### **School for the Campus Residents**

The Campus School is located right side of entrance of Institute. Planned as a Four Cluster unit, the 2 storey RCC building with a height of about 12 m covers a built up area of about 2800 sqm.

The Façade is characterized by jali elements (ferro-cement/ concrete) with shading performance. The jali modes according to direction to reduce solar impact.

Campus school has facilities for 12 Classroom, Music/art room, Auditorium, Medical room, office area, Staff room, Library, Science labs, VOC lab, Computer lab, Courtyard, Foyer ,2 Escape staircase. Sport / game / recreation facilities and common green space.

#### Hospital

HCC has simple cubical form of building which follows function. It is a Ground +2 building having a plinth area of 1600 Sqm approximately.

It accommodates 22 beds including 4 beds in casualty (height: G+2), 4 OPDs with rotational visiting doctors. 1 operation theatre with pre-op and post-op, attached toilet, changing rooms, equipment rooms, scrub area. Each floor has common ladies and gent's toilet. Wards, duty doctor's room and nurses changing room has attached toilets.

#### **Hostels for Students**

Hostel Complex with 10 buildings with 316 students per building, 6 pavilions for Sport / game / recreation facilities. Each tower having a plinth area of approximately 8500 Sqm.

Both plots accommodate 10 buildings at the height of G+10 each of 31M height.

Each building is formed by four clusters on one level and is provided with four extra size rooms on ground floor for physically challenged students. Two of those share one bathroom, which is equipped accordingly. Each building has a Refuge terrace on 8th floor with Fire exit access as per NBC for Firefighting.

#### **Students' Commons**

The site for The Commons building is located centrally in the Master Plan for the IIT Hyderabad having a site area of 9490 sq.m. The building houses a mix of spaces for Student activities planned on four main levels, with one level above Ground floor and two levels below the Ground floor. The average floor to floor height is 4.2 meters.

The total built up area of The Commons Complex is 5,722 sqm. The activities happening at various floors are as below:

#### Ground Floor:

- Student Organization rooms.
- Student Support facilities.
- Counseling rooms.
- Center for Students with disabilities.
- Display Gallery.

#### First Floor:

- Student Organization rooms.
- Games Area.

### Ground -1 Floor:

- Placement Interview Rooms.
- Informal meeting Rooms.
- Book Store and Apparel Store.
- Video Conferencing Rooms.
- Food Court, Coffee Shop and Kitchen.
- Amphitheater and ancillary spaces.
- Indoor theater seating (200 people).

Ground -2 Floor:

• Central Interaction space (performance area)

This Complex is a mix of R.C.C Frame structure and Structural Steel System with the Tensile Fabric roof over the Central Interaction space.

# **Shopping Centre**

A simple shopping centre is proposed on the eastern side of the housing area in the master plan. It is a Grounnd+1 storey RCC building to accommodate facilities to cater to the shopping needs of the residents and students. Approximate area of the building is 2500 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

- 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.

# 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

b. 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.

Japan International Cooperation Agency

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URL:http://www.jica.go.jp E-mail:gltps-lp@jica.go.jp