Policies and Procedures Handbook Illinois Institute of Technology

Subject: Facilities Modification: Construction Design Page 1 of 4

And Contract Approval Process

The requirements, procedures and approvals set forth in this policy are applicable to all construction undertaken on any IIT campus, whether relating to new facilities or the

remodeling of existing facilities. The various phases of the construction process include:

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- 1. Project Request,
- 2. Design Team Selection,
- 3. Scope of Services and Fees,
- 4. Pre-design,
- 5. Schematic Design,
- 6. Design Development,
- 7. Construction Documents,
- 8. Bidding.
- 9 Construction, and
- 10. Occupancy.

The construction process assumes an architect or engineer will be hired to prepare drawings and specifications and provide construction administration services. Design services may also be accomplished via a contract for architectural and engineering services or a design/build contract. A project may proceed without an architect or engineer only with the approval of the Vice President for Facilities & Public Safety (or designee). For most projects, an architect's seal will be required for architectural and related drawings, and engineering registration will be required for mechanical, electrical, plumbing, fire protection, structural, civil, data and telephone wiring and related engineering documents. The need for an architect's seal and/or engineering registration may only be waived by the Vice President for Facilities & Public Safety (or designee). At the discretion of the Vice President for Facilities & Public Safety (or designee), a project that is particularly complex may require specialists to provide specialty services.

Although not all phases are required for every construction project, the following description reviews the purposes for and requirements of each of these phases.

1. Project Request

This is the initial phase, and it defines what is required of the project in terms of addressing an end user's needs, space requirements, building functions, systems and desired features. During this phase the following actions shall be taken:

A. The President, Provost, Dean, Vice President, Director or Department Head (the "Requesting Party") requesting a project may enter a *Service Request* using the then-existing online integrated work order system (currently branded as "FAMIS"), or contact the Vice President for Facilities & Public Safety directly. The work order system is accessed through the myIIT portal

at http://my.iit.edu/. The Director of Planning, Design, and Construction (or designee) will review the request for completeness, and if it is complete, he or she will forward the request to the Vice President for Facilities & Public Safety for review and approval of the project. Factors in considering project approval at this stage include, but are not limited to, alignment with the campus space use plans, campus master plans, and university strategic plan.

- B. Upon approval of the project by the funding dean or vice president, and by the Vice President for Facilities and Public Safety, Provost or President as appropriate based on scope, size and other relevant factors, the Vice President for Facilities & Public Safety (or designee) will establish a preliminary statement of anticipated project costs. Once this estimate is finalized, it will be sent the Requesting Party, who will be required to (i) secure any necessary budgetary approvals for the project, and (ii) report to Office (defined below) an account number against which project expenses should be charged.
- C. Upon receipt of an account number, the Vice President for Facilities & Public Safety (or designee) will assign the project an estimated start date for design and for construction, which will be reported to the Requesting Party.

2. Design Team Selection

Upon completion of the Project Request Phase, the Director (or designee) of the Department of Facilities' Office of Planning, Design, & Construction (the "Office") will coordinate the selection of the project's architect and/or engineering consultant if such architect and/or consultant is required. In conjunction therewith, the Director may also develop a list of qualified firms to be considered, schedule selection committee meetings and coordinate any needed communications with consultants.

Based upon the size and complexity of a project, the Director may waive this phase and utilize in-house design services.

3. Scope of Services and Fee Negotiation

Upon selection of a project's architect and/or engineering consultant, the Director (or designee) will oversee, in consultation with the Requesting Party, the preparation of a proposed scope of services and negotiation of fees for the requested services. The proposed scope should define what design services are necessary to achieve the project's goals and should be used as the basis for negotiating the contract scope and professional services fee(s). For projects that are managed internally by the Office, an appropriate project management fee will be charged in order to cover the costs of coordinating and managing the construction process.

4. Pre-design

For projects of a large and/or complex nature, the Director may undertake a Pre-design Phase during which he or she will coordinate, in consultation with the Requesting Party and any other necessary departments, the services required to precede to the Schematic Design Phase, including, but not limited to, programming, site or space selection, evaluation and documentation of existing facilities.

5. Schematic Design

In conjunction with the Requesting Party, the Director (or designee) will oversee the production of outline specifications, a more detailed statement of anticipated or probable cost, the area of construction and the schematic floor plan, site plan and exterior drawings (if required). Upon completion of these elements, the project, along with the documentation and drawings produced to date, will be submitted to the Vice President for Facilities and Public Safety for review and approval in consultation with such other University officials as may be appropriate. If approved, any required adjustments will be made to the project budget, and the Requesting Party will confirm that sufficient funds are available in the designated account to complete the project. A project shall not move forward until the Office has received such a confirmation from the Requesting Party.

6. Design Development

For projects receiving approval at the Schematic Design Phase, the Director (or designee), in consultation with the Requesting Party, will coordinate the detailed defining of project characteristics and scope. Materials will be selected, specifications will be refined, and probable cost will be reviewed. Products of this phase will include dimensioned floor plans, wall sections, structural layouts, heating, ventilation and air conditioning (HVAC) system layouts, plumbing and electrical system layouts and technology system layouts.

7. Construction Documents

The Director (or designee) will coordinate the production of working drawings and technical specifications, which will be known as the Construction Documents. The Construction Documents will serve as the documents upon which contractors will base their bids.

8. Construction Contractor Selection

Upon receiving any required university approvals, the Director (or designee) will coordinate the procurement of construction services for the project using the most appropriate construction delivery method as approved by the Vice President for Facilities and Public Safety. Such methods may include general contracting, construction management (CM atrisk or as-agent), task order contracting, design/build and integrated project delivery. In bid situations, the Director (or designee) will coordinate bidding of the project, which will include issuing construction documents for bid, receiving bids, reviewing bids and determining the lowest responsive, responsible bid. In construction management delivery, the Director (or designee) will coordinate the RFP process to select a construction manager that represents the best value to the university and will monitor the construction manager's development of a Guaranteed Maximum Price proposal which is supported by multiple subcontractor bids for each major trade. Other delivery methods mentioned above will, when used, be coordinated by the Director (or designee) and be awarded after an RFP process and determination of best value to the University. The Vice President for Facilities & Public Safety shall have, consistent with university policies, final authority to award project-related contracts, and he or she shall execute any and all contracts related to the project or to recommend and coordinate execution by higher authority as specified by University policy.

9. Construction

The Director (or designee) will take the steps necessary to ensure that the university receives the construction products and quality of construction required in the Construction Documents.

10. Occupancy

The Director (or designee) will notify the Requesting Party when occupancy is permissible or when a project is complete. At the time of occupancy or completion, architectural and engineering services generally will have ended; however, additional services such as an inspection prior to the expiration of the typical one-year construction warranty period and commissioning of HVAC systems may be undertaken. The Director, in consultation with the Requesting Party, as needed, will coordinate any additional services required given the nature, size and complexity of the project.