

# Glossary of Terms

## Design and Construction



Note: Each institution uses variations of these terms. For the most part, the list below follows national conventions based on AIA guidelines. Check with your facilities, design or capital projects department for your institution's current information.

### DESIGN TEAM

- A/E (AE) - Architectural and Engineering team including architects, mechanical (HVAC and plumbing), electrical, civil and structural engineering.
- Acoustical Consultant - Provides design criteria to control noise and enhance acoustics.
- Theatrical Consultant - Provides criteria and/or documents for the technical requirements for performing arts spaces - lighting, rigging, audience seating and sightlines, stages, platforms, etc.
- Audio, Visual, Communications, Media Consultant - Provides criteria and/or documents for sound and communications systems, recording, broadcast, and video projection. May be on the acoustical or theatrical consulting team.
- User(s) – refers to the end users of the space or facility – faculty, staff, students, performers, etc.
- User Representatives – person designated to speak on behalf of Users' interests.

### SERVICES, CONTRACTS, DELIVERY

- Basic Services - The standard scope of work performed by the A/E team.
- Additional Services - Optional services provided by the A/E upon owner's request.
- Project Delivery Method – Selected process of design, pricing and construction as it relates to contractor.
- Design-Bid-Build Delivery  
Traditional process whereby design is completed before bidding occurs, and construction follows bidding. Usually this process offers the ability to best balance quality, cost and schedule. The bid process may vary according to state laws, and ability to be selective.
- Construction Manager  
Optional consultant who may get involved early in design phases. Sometimes acts as Owner's representative, sometimes as general contractor, and usually performs estimates and monitors budget. Usually gets involved when owner wants to accelerate schedule, or reduce costs.

### PROJECT PHASES

- Project Pre-Planning - Process varies dependant on specific institution's requirements, anticipated funding sources, and projected timeline.
- Feasibility Study - Study meant to define program, size, scope, and cost of project. May focus on site feasibility, but often includes assessment of need, demographics and funding.
- Master Planning - Development of design guidelines for a site, precinct, or entire campus. May address building characteristics, landscaping, signage, density, and growth.
- Program - A written statement of design objectives, criteria, and constraints for a project. At a minimum this is a list of spaces with square footage for each. More often this program addresses both quality and quantity issues including specific room requirements, relationships, equipment, and systems. Also called Program of requirements (POR).
- Programming - Process in which architect defines the specific requirements of the project, based on owner/user input.
- Predesign (PD) - Variation on Programming phase, but may include building design concepts.
- Schematic Design (SD) - The first phase of the architect's basic services. Architect with owner ascertain the requirements of the project and prepares schematic design studies consisting of drawings and other documents showing the scale and project components for the owner's approval.
- Design Development (DD) - The second phase of the architect's basic services. Architect prepares drawings and other presentation documents to fix and describe the size and character of the entire project as to architectural, structural, mechanical and electrical systems, materials and other essentials as may be appropriate; and prepares a statement of probable construction cost.
- Construction Documentation (CD) - Working Drawings - Detailed design work, coordination and drawing of documents to be used for bidding and construction.
- Conceptual Design (CD) – Used by some institutions to refer to PD or SD phases above.
- Preliminary Design (PD) - Used by some institutions to refer to PD or SD phases above.
- Detailed Design (DD) - Used by some institutions to refer to DD or CD phases above.
- Bid Phase - Documents are distributed for pricing. Public bids are open to all, while some projects allow for pre-selection of preferred bidders.
- Construction Administration - Refers to the work done by non-laborers during the Construction Phase (i.e. Design team, owner's representative, campus staff, etc.)

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### PROJECT PLANNING AND MONITORING

- **Project Scope**  
What is included in the project (quantity and quality).
- **NSF**  
Net square feet (actual useable space not including wall thickness, corridors, stairs, toilet rooms, mechanical, electrical, etc.).
- **ASF**  
Assignable square feet (similar to NSF, but usually interpreted by campus guidelines and sometimes with FTE).
- **GSF**  
Gross square feet (includes all floor space within surface of exterior walls; various interpretations used to assess roof penthouses, catwalks, temporary platforms, etc.).
- **Net to Gross**  
A measure of building plan efficiency (various interpretations used due to variable approach to gross square footage).
- **Project Cost/Budget**  
Cost/budget of entire project including construction, design fees, permits, surveying, furniture, loose equipment, telecommunications, moving; sometimes includes land acquisition, demolition, utilities, etc.
- **Construction Cost/Budget**  
Cost/budget of construction, including materials, labor, site-work, fixed equipment; generally everything the contractor provides.
- **Escalation**  
The percent, or dollar amount associated with inflation from planning to bid time.
- **Value Engineering**  
Process of analyzing cost savings possible by using alternate design approaches, materials, construction processes, etc. (Often occurs late in project causing much angst. We promote a process of "value selection" to occur from beginning).
- **Contingency**  
A sum included in the budget for unpredictable and unforeseen factors. Design/estimator's contingency cover items not yet identified or developed. Owner's/construction contingency is meant to cover unexpected and discretionary changes that occur during construction.