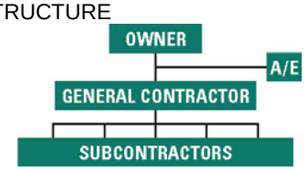
The Texas A&M University System

A Primer on Construction Delivery Methods

COMPETITIVE BID (DESIGN/BID/BUILD)

Often referred to as Design/Bid/Build, this method is the one with which most owners are familiar. It is a linear process where one task follows completion of another with no overlap. Plans and specifications are completed, and then advertised for bids. Contractors bid the project exactly as it is designed with the lowest bidder awarded the work.

STRUCTURE



SCHEDULE

ADVANTAGES

- Familiar delivery method
- Easy process to manage
- Defined scope
- Single point of accountability
- Lowest price accepted
- Good for uncomplicated projects that are budget sensitive, but are not schedule sensitive and not subject to change

DISADVANTAGES

- Linear process means longer schedule
- May require re-design or re-bid to meet budget after bid
- No control over contractor selection
- No control over subcontractor selection
- No budget or design input from contractor
- Not suited for projects that are sequence, schedule or change sensitive

H.U.B. PARTICIPATION

- No input or control over subcontractor selection
- HUB plan required

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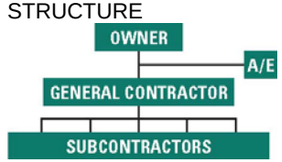
COMPETITIVE SEALED PROPOSALS

Many aspects of this delivery process are similar to competitive bid, with two major exceptions. First, proposals are evaluated against published criteria, one of which is price. An award is made to the firm providing the best value. Second, Competitive Sealed Proposals allow modifications to the proposals before the bid is accepted, which allows the owner to negotiate a change of scope before accepting the bid.

STRUCTURE



SCHEDULE

ADVANTAGES

- Flexibility in contractor selection
- Enables the scope to be redefined to fit the budget without having to re-bid
- Single point of accountability
- Allows award based on value rather than price alone: lowest price usually accepted
- Good for uncomplicated projects that are budget sensitive, but are not schedule sensitive

DISADVANTAGES

- Linear process means longer schedule
- Some control over contractor selection
- No control over subcontractor selection
- No budget or design input from contractor prior to bid
- Not suited for projects that are sequence or schedule sensitive
- No input on constructablity until after bids are received

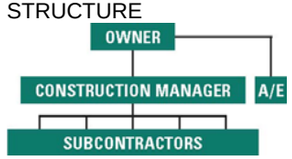
H.U.B. PARTICIPATION

- No input or control over subcontractor selection
- HUB plan required

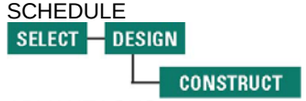
CONSTRUCTION MANAGER AT-RISK

CM at-Risk allows the Owner to interview and select a fee-based firm to manage construction before design is complete. The construction manager and the architect work together to develop and estimate the design. A guaranteed maximum price (GMP) is provided by the CM, who then receives proposals from and awards contracts to subcontractors. The final construction price is the sum of the CM's fee, the subcontractors' bids and allowances. The Owner will not pay more than the GMP, and retains a portion of savings.

STRUCTURE



SCHEDULE



ADVANTAGES

- Construction firm selected by interview based on quality rather than low bid
- Early CM involvement in estimating and constructability
- Owner selects architect and CM separately and may be involved in selection of subcontractors
- All work except CM fee is bid
- Single point of accountability: CM at-Risk signs contracts with all subcontractors
- Guaranteed maximum price
- Enables fast-track delivery (construction begins before design is complete), saving time
- Good for large, complex projects

DISADVANTAGES

- Negotiated CM fee is not competitively bid
- Not suited for small projects

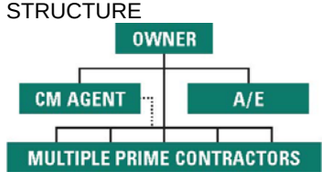
H.U.B. PARTICIPATION

- Owner has opportunity to participate in subcontractor selection
- HUB plan required

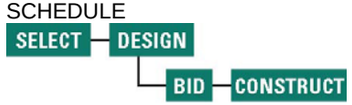
CONSTRUCTION MANAGER-AGENT

CM Agency differs from CM at-Risk in the lack of a guaranteed maximum price. Here, the Owner contracts with both a construction manager and an architect, but signs separate contracts with each subcontractor who will actually perform the work.

STRUCTURE



SCHEDULE



ADVANTAGES

- CM selected on quality rather than low bid
- Early CM involvement in estimating and constructability
- Owner selects architect, CM and subcontractors
- CM responsible for delivery of project in budget and on schedule
- Enables fast-track delivery (construction begins before design is complete), saving time

DISADVANTAGES

- CM has no contractual responsibility with subcontractors
- Final price is not established until all packages are bid
- No guaranteed maximum price
- Owner manages multiple contracts
- Cost may be higher with multiple prime contractors.

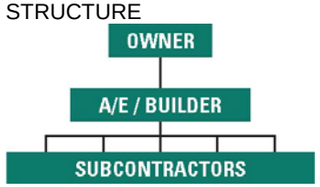
H.U.B. PARTICIPATION

- Higher opportunity to direct H.U.B. participation but greater management costs
- HUB plan required

DESIGN/BUILD (POSSIBLE LEASEBACK)

Under the design/build delivery system, the builder and architect are one entity hired by the university to deliver a completed building. A guaranteed maximum price (GMP) is usually furnished at the very beginning based on design criteria prepared by the university. The architect/builder then develops drawings that fulfill the criteria while staying below the furnished GMP. Upon completion, the building is either leased or turned over to the university, depending on the funding source.

STRUCTURE



SCHEDULE

ADVANTAGES

- Single point of accountability for design and construction
- Enables fast-track delivery (construction begins before design is complete), saving time
- Early GMP facilitates alternative financing methods
- GMP eliminates Owner concern with cost overruns

DISADVANTAGES

- No check and balance between architect and builder
- Owner must select a team rather than the best architect and best builder
- Design is completed after GMP is given
- Difficult to control quality because design/build team must only meet minimum criteria standards

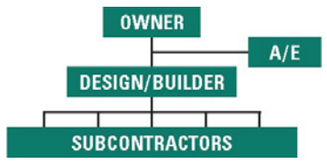
H.U.B. PARTICIPATION

- No input or control over subcontractor selection
- HUB plan required

BRIDGING

Bridging combines the traditional design process with design/build delivery. The Owner selects an architect who develops the design to the 30%-50% document stage. The owner then selects a design/build team to complete design and construction of the building. This process is best suited to larger, new or renovation projects that are schedule sensitive and difficult to define.

STRUCTURE



SCHEDULE

ADVANTAGES

- Single point of accountability for final design and construction
- Potential for faster delivery
- Owner gains better understanding of design before awarding Design/Build contract
- GMP eliminates Owner concern with cost overruns

DISADVANTAGES

- No check and balance between designer and builder
- Design/build team only meets minimum criteria standards for quality
- Potential for conflict between architect and design/builder
- Not suitable for small projects or those subject to change

H.U.B. PARTICIPATION

- No input or control over subcontractor selection
- HUB plan required

Basic information made available by American Institute of Architects.