

Virginia Public Procurement Act (VPPA)

Project Design and Construction Methods

Virginia Public Procurement Act

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Presentation Outline:

- VPPA Public Body Applicability
- Architect/Engineer (A/E) Services Associated with Project Construction Methods
- Construction Methods
 - Design-Bid-Build (DBB)
 - Construction Manager at Risk (CM)
 - Design-Build (DB)

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Public Body Applicability:

- State Agencies
- Institutions of Higher Education: 10 fully comply; 6 have authority to modify procedures
- Local Public Bodies: However VPPA allows Local Public Bodies to adopted, through ordinance or resolution, procedures consistent with VPPA
- Standard/Consistent procedures do not exist for all the Commonwealth's Public Bodies

* This slide deck describes design and construction methods followed by state agencies and some institutions of higher education pursuant to the VPPA

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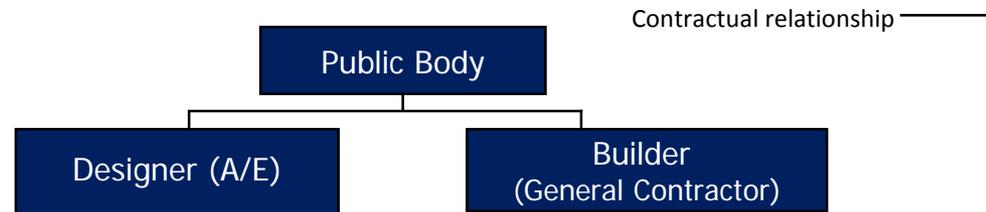
Architect/Engineering (A/E) Services:

- All construction methods require an A/E component
 - A/E on-board at different times in the construction timeline
 - A/E relationship with owner differs based on construction method
- A/E procurements are procured using competitive negotiations
 - Request for Proposals
 - Qualifications based selection
 - Negotiations conducted with offeror ranked first
 - Negotiations either successful with first offeror; if not, move to second ranked offeror

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Design-Bid-Build

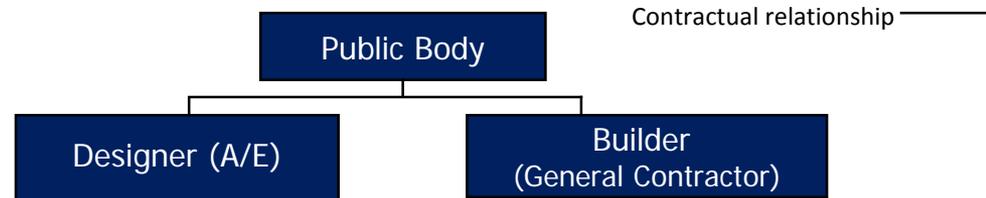


- Designer (A/E):
 - Works under direct contract with/for public body
 - Procured before contractor
 - Completes entire design
 - Design documents are bid documents for builder community to analyze and prepare bids
- Contractor:
 - Works under direct contract with/for public body
 - Procured via Invitation for Bid (IFB)
 - Bid on design documents
 - Low responsive and responsible bid wins award

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Design-Bid-Build

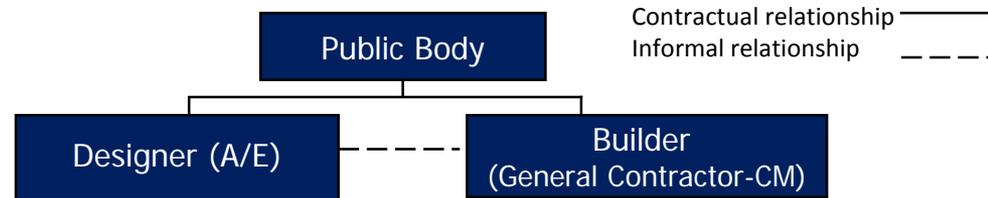


- Advantages:
 - Provided public body design scope is clearly defined and complete this procurement method can result in very competitive costs
 - Public body has full control over design
- Disadvantages:
 - Longest method to contract with A/E and Builder due to sequential procurement processes
 - Design documents must be complete and accurate – or change orders can become costly and contentious between public body and builder
- Applicable types of construction:
 - Any

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Construction Manager at Risk (CM)

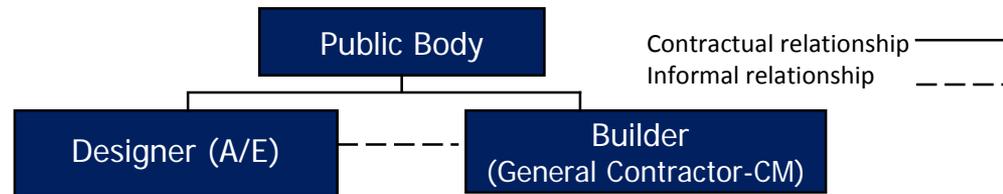


- Designer (A/E):
 - Works under direct contract with/for public body
 - Procured before CM on-board
 - Works with CM (oversight by public body) to analyze costs and constructability during design
 - Completes the design
- Builder (CM):
 - Works under direct contract with/for public body
 - Pre-construction services (analyze costs and constructability) working collaboratively with A/E
 - Procured via Secretary of Administration Procedures (VPPA) - §2.2-4306
 - Two step process – Request for Qualifications (RFQ) then Request for Proposals (RFP)
 - Competitive negotiation process at RFP step
 - 10% of construction work performed by CM; 90% of construction work to be performed by subcontractors

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Construction Manager at Risk (CM)

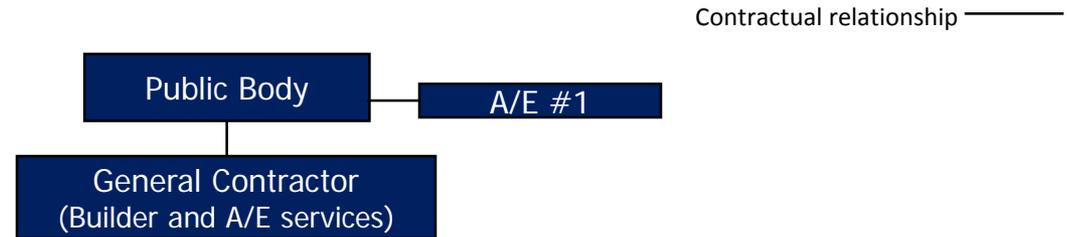


- **Advantages:**
 - Leverage A/E and CM collaboration in cost analysis and constructability
 - Public body has full control over design and can adjust as cost analysis and constructability information is developed
 - A guaranteed maximum price (GMP) is established placing cost risk on CM
 - Can phase work to accelerate schedule – most projects quicker method than (DBB)
- **Disadvantages:**
 - CM selected based on pre-construction services costs – GMP established later in design process
 - Public body requires skilled procurement, contract administration, and construction project management staff
- **Types of construction:**
 - High rise, correctional facilities, hospitals, laboratories, higher ed specialized classrooms
 - Limited to projects with a construction value greater than \$10,000,000
 - Used when fast tracking of construction is needed; or value engineering/constructability analyses concurrent with design are required

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Design Build (DB)

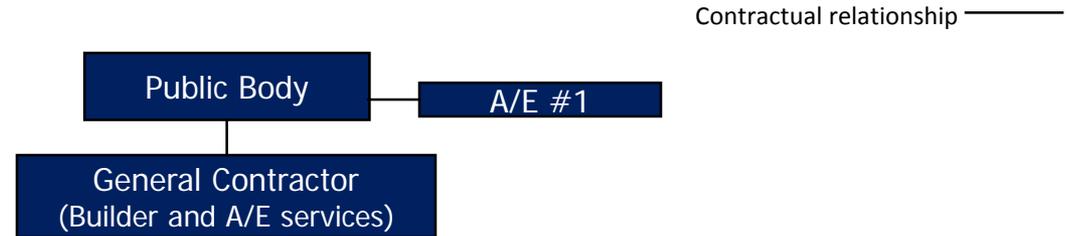


- **A/E #1:**
 - Works under direct contract with/for public body
 - Procured before general contractor procurement process begins
 - Develops “bridging documents” (25% scope of work)
 - “Bridging documents” used in scope of work for general contractor procurement process
 - Does NOT work for general contractor; direction comes from public body
- **General Contractor:**
 - Works under direct contract with/for public body
 - General Contractor team includes:
 - Builder services
 - A/E services
 - Single contract where builder and A/E services are controlled by the general contractor
 - Procured via Secretary of Administration Procedures (VPPA) - §2.2-4306
 - Two step – Request for Qualifications (RFQ) then Request for Proposals (RFP)
 - Technical proposals evaluated separately from cost based on award criteria

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Design Build (DB)



- Advantages:
 - Public body has single point of contact (general contractor) for builder and A/E services
 - Quickest delivery among DBB, CM, and DB, facilitates early start and phasing of construction
- Disadvantages:
 - Public body has less control over design
 - Relationship between general contractor team, (builder and A/E services) can influence project design and costs
 - Public body requires skilled procurement and contract administration staff
- Types of construction:
 - Simple buildings, warehouse, parking decks, dorms, “cookie cutter” facilities
 - Used to minimize project risk for public body and to reduce delivery schedule

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Summary

- Design A/E services required for all construction methods
- Design-Bid-Build (DBB) – low bid
 - Competitive costs to complete construction
 - Public body full control
 - Longest procurement process to contract with A/E and Builder
 - All types of buildings
- Construction Manager at Risk (CM) – Secretary Administration Procedures
 - A/E and CM collaborate early on costs and constructability
 - Guaranteed maximum price established
 - Requires knowledgeable and skilled procurement, contract administration and construction project management staff to be successful
 - Can phase work to reduce project timeline
 - Complex buildings
- Design Build (DB) – Secretary Administration Procedures
 - Public body single contract with general contractor (builder and A/E services)
 - Public body loses some control over builder and A/E services
 - Can phase work to reduce project timeline
 - Simple buildings

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Summary

- Public bodies consider the following when deciding project design and construction method:
 - Complexity (simple, complex)
 - Cost
 - Schedule
 - Use
 - Agency resources: procurement, contract administration, and construction project management expertise