

Alternative Delivery Methods

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1/17/12

Alternative Delivery Methods:

Construction Methods Over Time:



3100 BC

Master Builder



1885

General Contractor



1960

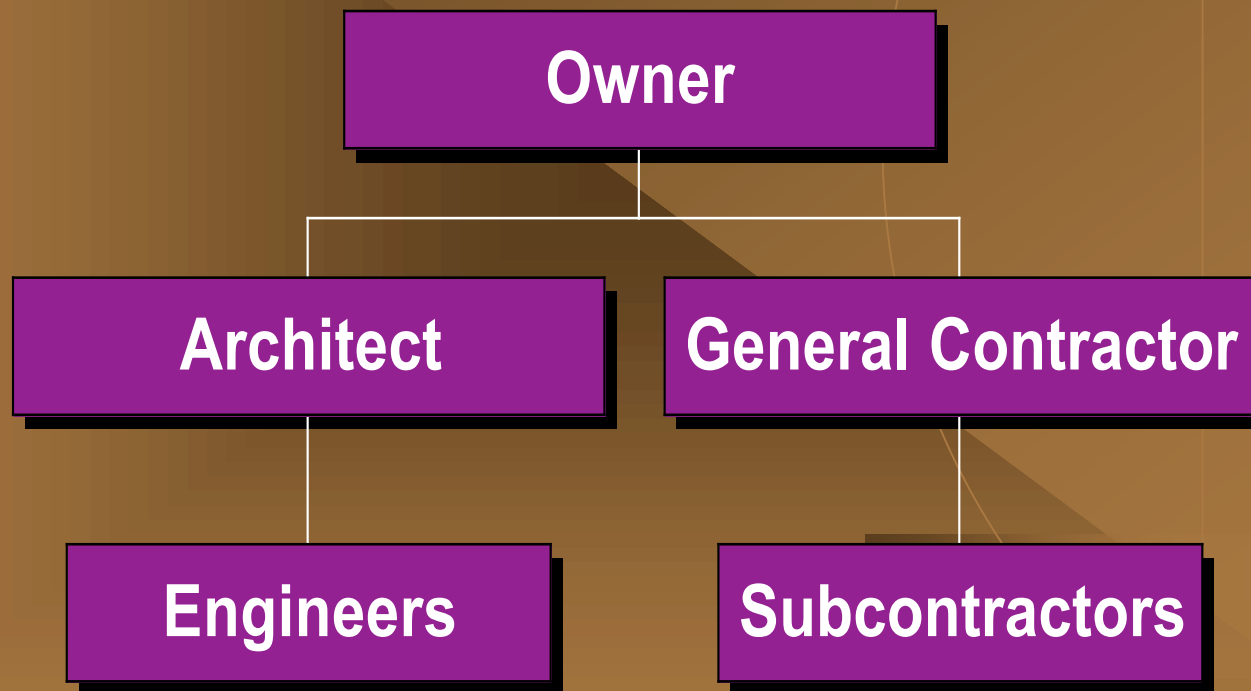
Multiple Prime



1992

Design/Build

General Contractor Delivery Structure:



General Contractor Attributes:

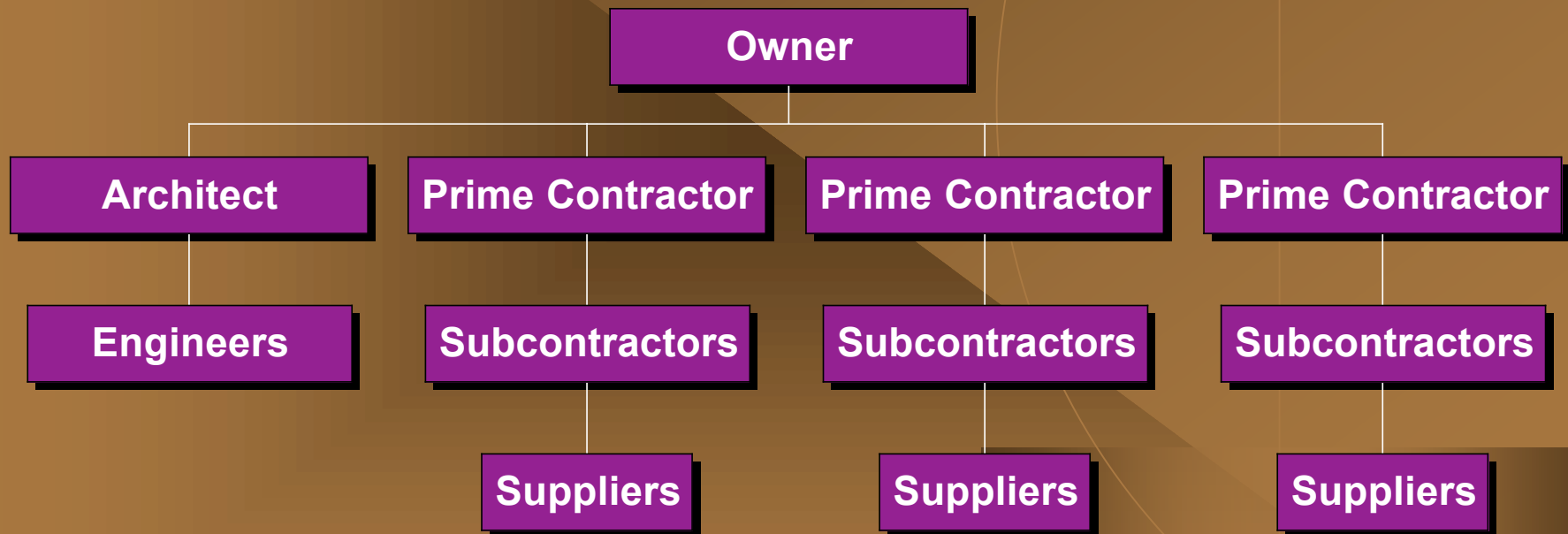
◆ **ADVANTAGES:**

- ◆ **Design is complete; Able to secure competitive bids; Able to secure Fixed Price Contract**
- ◆ **Single source of responsibility for Design**
- ◆ **Single source of responsibility for Construction**

◆ **DISADVANTAGES:**

- ◆ **Adversarial**
- ◆ **Long Duration**
- ◆ **Cannot attain Fixed Price until Design is complete**

Multiple Prime Contractor Approach:



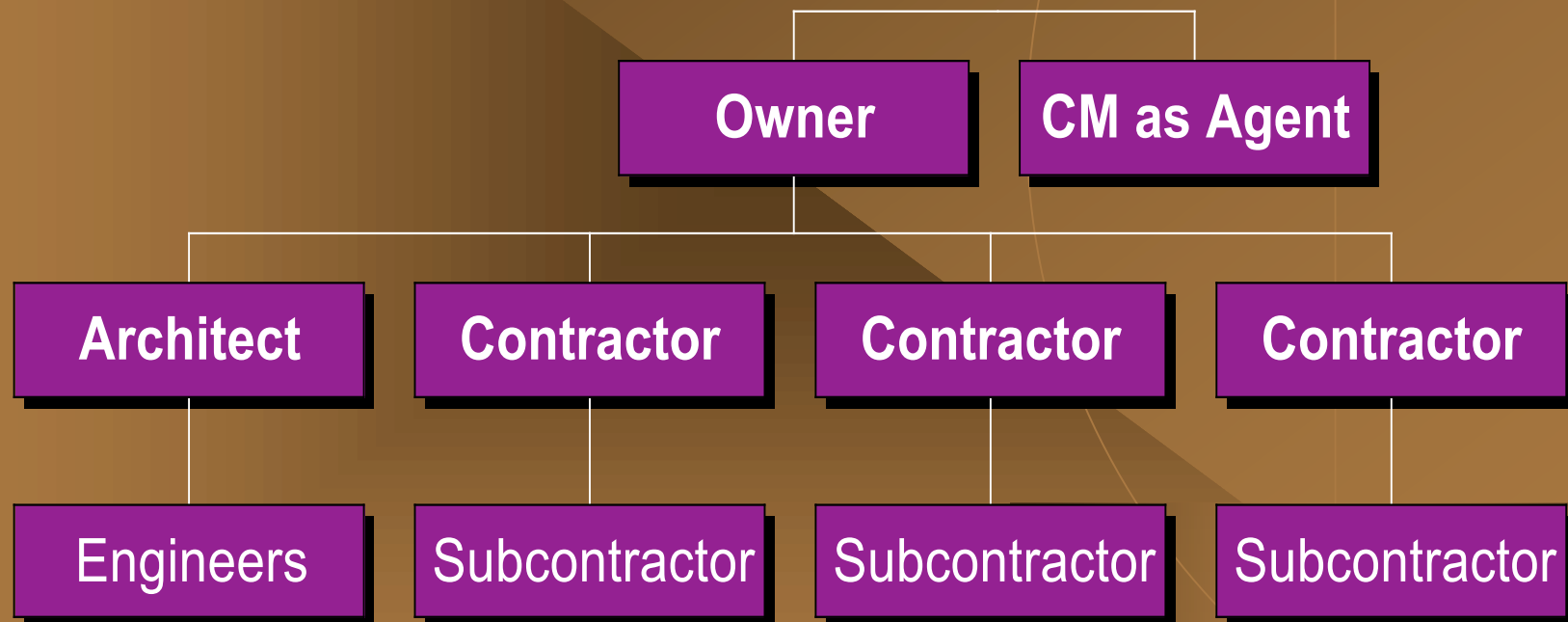
Multiple Prime Contractor Paradigm Attributes:

- ◆ **Time Savings Through Sequential Bidding**
- ◆ **No Fixed Price until last Package is Bid**
- ◆ **No insulation of Owner**
- ◆ **Multiple Disputes**
- ◆ **No external management**
- ◆ **Heavy Administrative Burden**

Construction Manager “As Agent” Approach:

- ◆ Pre-Construction Service Provided
- ◆ Partial Fast Track
- ◆ No Fixed Price until last Package is Bid
- ◆ Big GMP Contingency
- ◆ CM is Advisor; has no Risk

Construction Manager As Agent Approach:



Construction Manager “As Agent” Attributes:

◆ **ADVANTAGES:**

- ◆ Improved Coordination?
- ◆ **Scheduling Control**

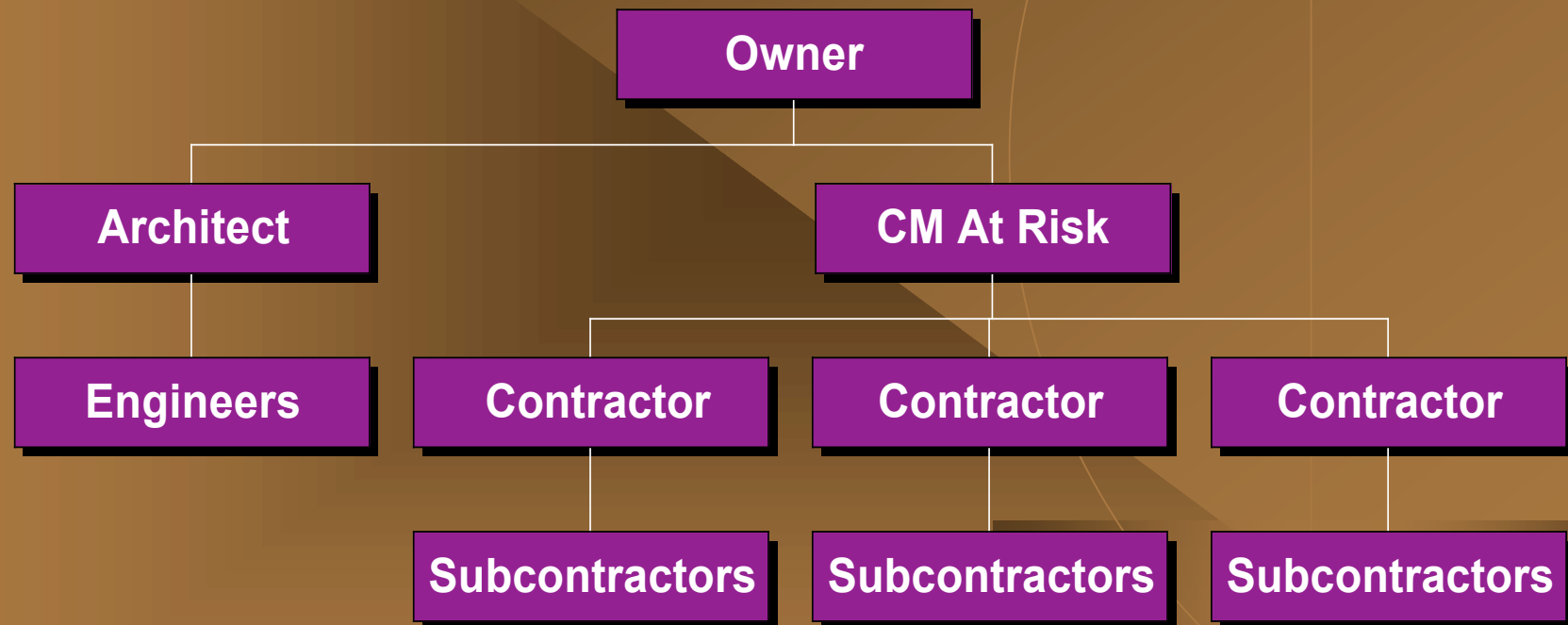
◆ **DISADVANTAGES:**

- ◆ No Fixed Price
- ◆ CM has no risk for poor coordination
- ◆ No Insulation of Owner
- ◆ Multiple Disputes
- ◆ Poor Pre-Construction Services

Construction Manager “At Risk” Approach:

- ◆ **Pre-Construction Services Provided**
- ◆ **Partial Fast Track**
- ◆ **Fixed Price Available**
- ◆ **Pre-Construction Services “At Risk”**
- ◆ **Fixed Price offered late**
- ◆ **Big GMP Contingency**
- ◆ **Heavy Administrative Burden**
- ◆ **Adversarial Setting**

Construction Manager “At Risk” Approach:



CM “At Risk” Attributes:

◆ **ADVANTAGES:**

- ◆ **Supposed improved coordination**
- ◆ **Supposed scheduling coordination**
- ◆ **Pre-construction Services**

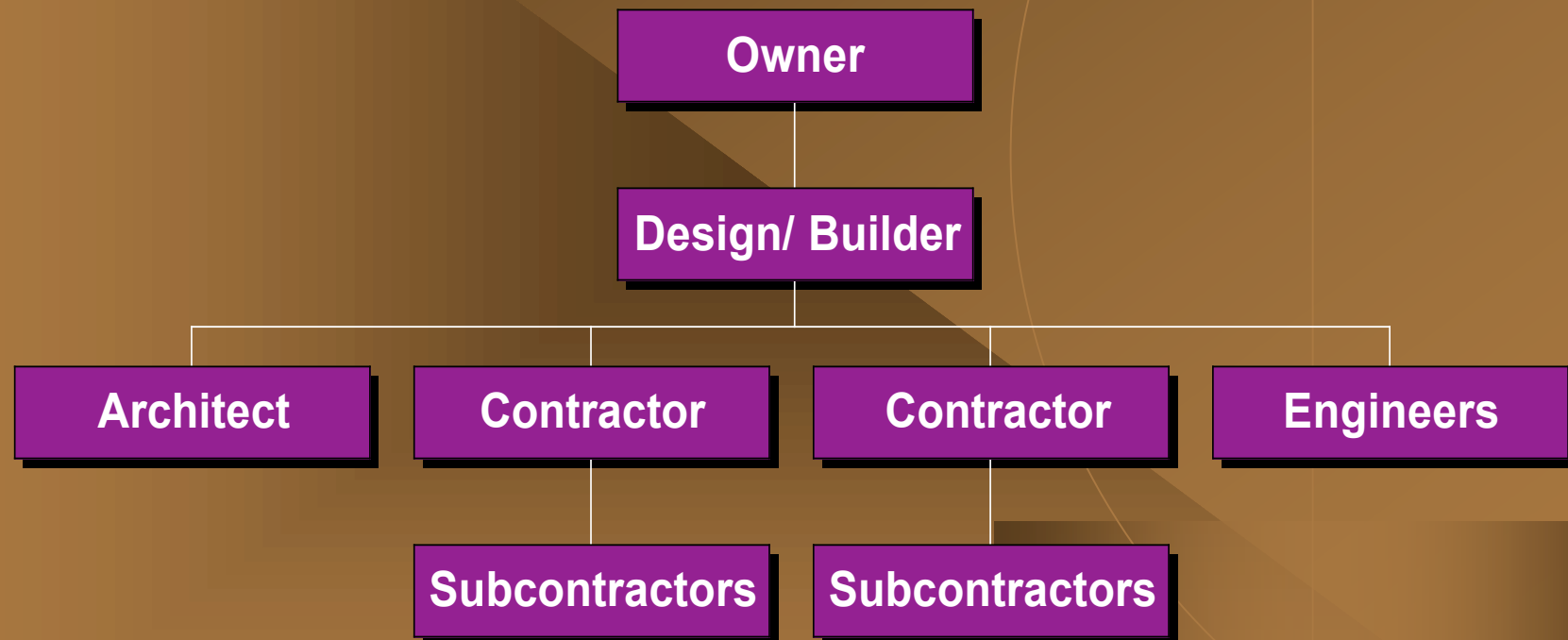
◆ **DISADVANTAGES:**

- ◆ **No Fixed Price until last package is Bid**
- ◆ **No insulation of Owner**
- ◆ **Multiple Disputes**
- ◆ **CM has low liability for quality of services**
- ◆ **CM has limited incentive for scheduling, quality control**

Conventional Design/ Build Approach:

- ◆ Owner retains Design/ Builder for single point of responsibility of Design, Quality, Cost Control
- ◆ Architect works for Design/ Builder
- ◆ Design/ Builder focused on Cost vs. Design, Quality, Program
- ◆ Fast Track Possible
- ◆ Minimal Administrative Burden

Conventional Design/ Build Approach:



Conventional Design/ Build Attributes:

◆ **ADVANTAGES:**

- ◆ **Single source of responsibility for Owner**
- ◆ **Owner has no mediation of Disputes**
- ◆ **Single point of communication**
- ◆ **Less paperwork- Facilitates Fast-Track**
- ◆ **Reduces Owner's Administrative burden**

◆ **DISADVANTAGES:**

- ◆ **Owner loses control over Design**
- ◆ **Owner's Program not given Priority**
- ◆ **AE is no longer Agent of Owner**
- ◆ **Owner loses communication with AE**
- ◆ **Wrong criteria for AE Selection (\$ vs. Qualifications)**
- ◆ **Limitation of Competition**
- ◆ **Inherent Conflict of Interest**
- ◆ **Creation of Hidden Costs**

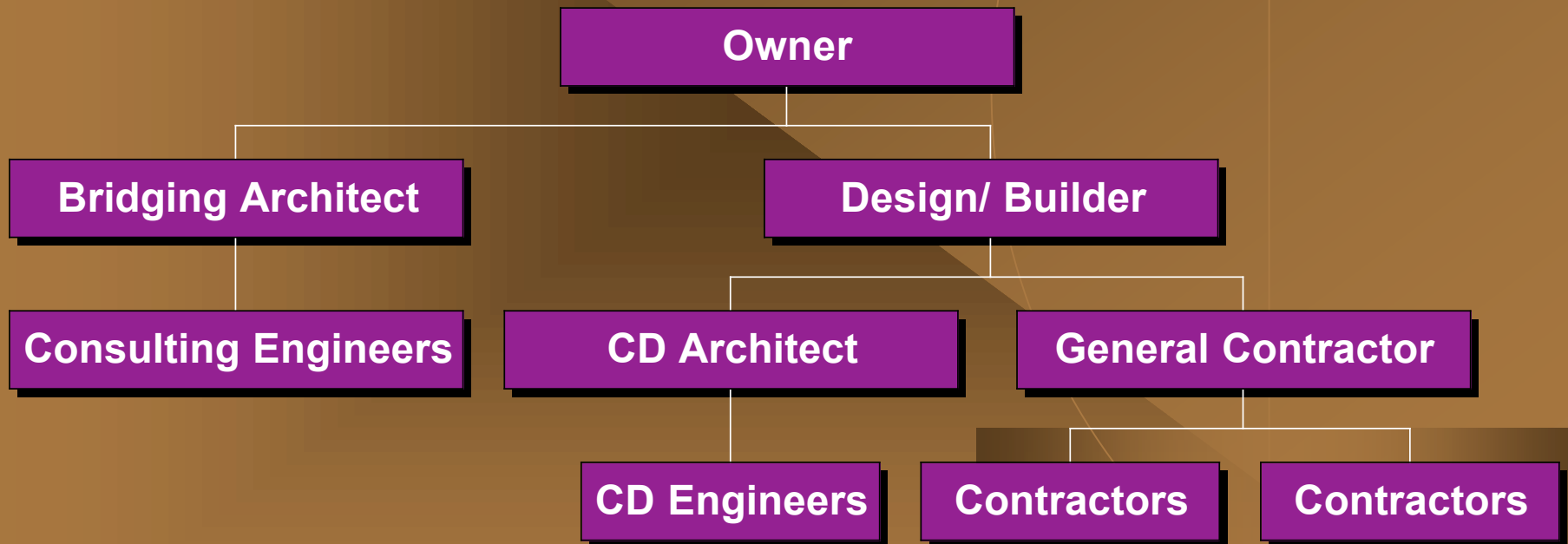
Design/ Build “Bridging” Approach:

- ◆ 80% of D/B disadvantages occur before development of CD's
- ◆ 80% of D/B benefits occur after Conceptual Design
- ◆ 80% of AE's are good at either Conceptual Design or CD's, not both:
- ◆ Therefore, Owner retains “Bridging Architect” to do Programming, Conceptual Design and Cost/Constructability Analysis
- ◆ Bridging Architect prepares Conceptual Design Bid Package (15% - 35%)

Design/ Build “Bridging” Approach:

- ◆ **Conceptual Design Bid Package is released to D/B’s for competitive bidding for CD’s & Construction**
- ◆ **Bridging Architect becomes Owner’s Representative: Reviews CD’s, assures conformance with Conceptual Design scope/ quality/ cost per D/B Agreement; Functions as Owner’s Rep during Construction**

Design/ Build “Bridging” Approach:



Design/ Build “Bridging” Outcomes:

- ◆ Eliminates Insurance problems; fewer Disputes; D/B Endorsement availability
- ◆ Eliminates inherent Conflict of Interest: 1). Design concept, scope is fixed identified, documented = enforceable; 2). Bridging AE works for Owner; 3). Bridging AE represents Owner through Completion
- ◆ Optimum Quality of Pre-Construction Services
- ◆ Delivers time and single-source advantages of conventional Design/ Build
- ◆ Insulates Owner from construction Disputes

Design/ Build “Bridging” Outcomes:

- ◆ Eliminates Owner’s administrative burden
- ◆ Cost is reduced due to Competition
- ◆ Occupant Needs are defined and used to drive the process forward
- ◆ Even competition, based on uniform work scope, quality requirements
- ◆ Eliminates Owner’s Loss of Control
- ◆ Eliminates Owner’s Loss of communication with Design

Design/ Build “Bridging” Outcomes:

- ◆ **AE Selection is based on Qualifications, not Price**
- ◆ **Eliminates limitation of Competition: 1). Bids are based on clear Design parameters; 2). Direct Competition of multiple bidders**

“Alternative Delivery Methods” Summary:

	General Contractor	Multiple Prime	CM As Agent	CM At Risk	Design/ Build	Design/ Build Bridging
Quality	High	Med.	Low	Med.	Low	High
Schedule	Poor	Better	Better	Better	Best	Best
Cost Control	Med.	Low	Med.	Med.	High	High
Liability	Low	High	High	High	Med.	Low

“Alternative Delivery Methods” Credits:

- ◆ **“Bridging” term originally coined by George Heery FAIA of Heery & Heery Intntl., Atlanta, GA**
- ◆ **“Bridging the Design/ Build Gap” article by Jeffrey Appelbaum Esq., Thompson, Hine & Flory, Cleveland, OH, available on [www.](#)**
- ◆ **“The Pro’s and Con’s of Design/ Build” article by William T. Eberhard AIA, IIDA of Oliver Design Group, Cleveland, OH, available via www.Oliver-Design.com.**