THE AIA DOCUMENTS
AIA DOCUMENTS

AIA A201

- Project General Conditions – Integrates with most forms

A Series

- Owner & Contractor Documents (including bond forms)

B Series

- Owner & Architect Documents

C Series

- Other Agreements (construction manager, consultants, subcontractors)

G Series

- Standard Forms - Payment Documentation, Change Orders, RFIs
2017 A-Series Owner-Contractor Contracts – Related to Project Payment Type

AIA A101
- Standard Form of Agreement Based on a Stipulated Sum (Lump Sum)

AIA A102
- Standard Form of Agreement Based on the Cost of the Work Plus a Fee with a Guaranteed Maximum Price

AIA A103
- Standard Form of Agreement Based on the Cost of the Work Plus a Fee without a Guaranteed Maximum Price

AIA A104
- Standard Abbreviated Form of Agreement Between Owner and Contractor

AIA A141, 141/2 - 2014
- Standard Form of Agreement Between Owner and Design-Builder
2017 A-Series Owner-Contractor Contracts – Related to Project Payment Type

LARGE PROJECTS

B103

10%

Extra-Large/Complex

B101

Large

B104

Medium

B105

Small/Simple

SMALL PROJECTS
PRICING VARIATIONS IN CONSTRUCTION CONTRACTS
Pricing Variations in Construction Contracts

Fixed Price (lump sum) contracts
- Contractor bears risk of cost overruns
- Contractor has possibility of windfall profits
- Encourages adversarial relationships

Cost-plus (time & materials – cost of the work) contracts
- Fee can be a percentage, fixed sum or any formula
- Difficult for owner to control costs
- May have a Guaranteed Maximum Price (GMP)
- May have a savings sharing clause with a GMP or target price
- Change orders only change GMP or target price
Pricing Variations in Construction Contracts

Unit Prices

- Owner pays a specified cost for a particular quantity of work
- Best for repetitive types of work (concrete, roadways, etc.)
COMPETITIVE BIDDING
Competitive Bidding – Traditional and Fast-Tracked Methods

Required for public projects

- Lowest Responsible Bidder
- Best Value Method (design-build)

Purposes: To achieve the lowest cost, and an impartial forum for contractor selection

“Short-Listing” of bidders

- Pre-qualification process
- After proposals are received
Competitive Bidding – Traditional and Fast-Track Methods

The typical process

- Invitation to bidders
- Submittal of bids/proposals
- Opening of bids/proposals
- Evaluation of bids/proposals
- Notification of award of project
- Signing a formal contract
Competitive Bidding – Traditional and Fast-Tracked Methods

Bidding errors – How are they addressed?

- Bids with clerical/arithmetical errors may be withdrawn (but not modified)
- Bids with judgment errors cannot be withdrawn
- Exception – The “snap-up” rule (where the owner should have known of the bidding mistake by comparison to other bids – gross disparity)
DIFFERENT TYPES OF CONTRACTING METHODS
I. TRADITIONAL CONTRACTING MODEL
Traditional Owner-Architect-Contractor
Traditional Owner-Architect-Contractor

Advantages
- It is common, so the marketplace is comfortable with it
- Plans are usually complete prior to bidding or final pricing
- Architect remains independent

Disadvantages
- Often little input from contractor during design
- Slower delivery time due to back-to-back phasing
- Often adversarial relationship between G.C. and A/E
- Price competition reduces profits or renders some projects unobtainable
- Claims Contractors
- Truth in Bidding
II. DEVELOPER AS PRIME MODEL
Owner – Developer Model

Owner

Developer

Architect
- Consultant
- Consultant

Contractor
- Vendor
- Subcontractor
- Subcontractor
III. FAST-TRACKING MODEL
Traditional v. Fast Tracking

**Traditional Method**

- Design
- Bid/Pricing
- Construction

**Fast-Track Method**

- Design
- Bid/Pricing
- Bid/Pricing
- Construction

• Advantage – Delivery speed of a completed project.
• Disadvantage – More difficult to control cost estimating and construction costs.
IV. MULTIPLE-PRIME CONTRACTING MODEL
Owner – Multi-Prime Model

- No role for the general contractor
  - Owner has all contracts directly
  - May be legal reasons for this contracting method
- Owners rarely are able to successfully manage and coordinate project
- Owner liable for management and coordination problems during construction
  - Time and cost management
V. CONSTRUCTION MANAGER CONTRACTING MODELS
Construction Management – Agency CM Model

- Retained to manage the construction
- Does not enter into the agreements with the trade contractors
- On-site observer – similar to architect’s role
  - Time and cost management
Construction Management – At Risk CM Model

- CM works with Owner for pricing and securing the subcontractors.
- After CM Agreement is executed CM essentially become general contractor.
- CM at Risk is liable for management and coordination problems during construction.
## Construction Management – Risk Spectrum

<table>
<thead>
<tr>
<th>Advisory CM</th>
<th>Agency CM</th>
<th>At-Risk CM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimal</td>
<td>Moderate</td>
<td>Highest</td>
</tr>
<tr>
<td>Another layer of consulting</td>
<td>Coordination and management for a fee</td>
<td>Ultimately its role is similar to a general contractor</td>
</tr>
</tbody>
</table>

- Biggest benefit of using CM is CM’s role during the design process.
VI. DESIGN-BUILD CONTRACTING MODELS
Traditional Design-Build Model

Owner

Design-Builder
Design-Build Relationships – Various Types

- Integrated Company
- Contractor is the Prime, A/E is the Sub
- A/E Prime is the Prime, Contractor is the Sub
- A/E is the Prime, Multiple Trade Subs retained
- Design-Builder Prime, A/E and Contractor Each Subs (Multiple Integrated Company)
- Joint Venture between A/E and Contractor (joint and several liability)
Multiple Integrated Company Model

Owner

Design-Builder

Design Affiliate

Construction Affiliate
Multiple Integrated Company Model

Owner

JV Design Affiliate

JV Construction Affiliate
Advantages of Design-Build

- Speed of project delivery
- Owner can look to design-builder for single-point responsibility
- Obtain cost certainty earlier and with better results
- Better communication of design intent from the design arm to constructing arm
- Less litigation and/or disputes
- Greater control of information by design-build team
- Negotiated pricing
- A/E and GC not adverse to one another
Disadvantages of Design-Build

- Loss of architect as independent decision maker or “policing body” on the project
- Pricing may be suspect depending on when the fast-tracking took place
- May be more of an economic risk depending on the design-builder entity
- Who is back-checking for the owner?
Design-Build: Differences in Architect’s Design Phase Services

- System-by-system design with “looping” feedback
  - Each system is designed semi-independently
  - Design of each system constantly modified by feedback from the construction team
- Informal communications rather than “defensive detailing”
- Greater incentive to explore alternative design concepts
- MEP/FP only schematic, and is ultimately designed and built by specialty subcontractors
Design-Build: Differences in Architect’s Design Phase Services

- Greater than usual pricing constraints and price input
- Out-of-sequence provision of design details to meet contractor’s need to price the project
- Heavier than usual reliance on performance specifications
QUESTIONS