PROGRESSIVE DESIGN–BUILD

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The Conflict in the Law

STANDARD OF CARE

The common law standard of care for performance of design professional services is generally defined as the **ordinary and reasonable care** usually exercised by one in that profession, on the same type of project, at the same time and in the same place, under similar circumstances and conditions. Perfect performance is not required by the common law.

SPEARIN DOCTRINE

*United States v. Spearin* (248 U.S. 132), also referred to as the **Spearin doctrine** is a 1918 United States Supreme Court decision. It remains one of the landmark construction law cases. **The owner impliedly warrants** the information, plans and specifications which an owner provides to a general contractor. The contractor will not be liable to the owner for loss or damage which results solely from insufficiencies or defects in such information, plans and specifications.

CONFLICT GAME ON

Designer is accountable to a reasonable standard of care, therefore Errors and Omission are acceptable within a limit.

Builder can assume contract is error free with no omissions.
Design/Build Statute in California

- DB Legislation passed more than 20 years ago
  - Included numerous limitations/resulted in many challenges
  - As of January 1, 2008, certain institutions can use design build under SB614.
  - Must be at least $2.5M in value
- 2014 the passage of SB 785 allows those state agencies who were previously precluded by law from combining design and construction services into a single contract or using a best-value selection process/expanded authorization
Then–1993

![Map showing design-build regulations in 1993](image)
Now

Design-Build 2014

- Design-build is limited to one political subdivision, agency or project
- Design-build is a limited option
- Design-build is widely permitted
- Design-build is permitted by all agencies for all types of design and construction

DBIA

CMAA
SOUTHERN CALIFORNIA CHAPTER
Need to evaluate the project based on five minimum criteria.

- Price (10%)
- Technical Experience (10%)
- Life cycle cost over 15 years (10%)
- Skilled Labor Force (10%)
- Safety Record (10%)
Why a New Way? Introduction

- The Owner’s Commitment to develop World Class Facilities
- Deliver Exceptional Project Outcomes (EPO)
- Develop Programs that meet all Stakeholder Requirements
- Become an Agency of Choice for Designers & Builders
- Create an Environment of Collaboration
- Develop a Partnered Approach
- Resolution & Problem Solving
- Enhanced Risk Allocation
- Promote Creativity & Innovation
- HAVE FUN!!!
Progress

Market Share Non-Residential

- Design-bid-build: 27%
- Design-build: 39%
- CMGC/CMAR: 32%

2013-2017 CPI: $2,779B

- Other: 2%

2018-2021 CPI: $2,729B

- Design-bid-build: 19%
- Design-build: 44%
- CMGC/CMAR: 35%
- Other: 2%
Proof is in the Numbers

- 102% faster than traditional design–bid–build
- 44% Market Share
- 600% Growth Rate from 2002
  - Transportation has been the largest growth sector
- Legislative authority in 48 states
- By the year 2022 83% of all projects will be delivered using a collaborative method of delivery

*Source Data/Design–Build Institute of America (DBIA) 2019*
Design–Build Variations

“Prescriptive DB”
- Includes some degree of design completion (usually 10–30%) as part of procurement
- Typically more price–based procurement
- Owner’s preferences are clearly defined in procurement documents
- Selection is based on some combination of qualifications, schedule & cost (GMP)
- During procurement owner has little input into this preliminary design
- Changes to any element of the project at a later date, after contract negotiations, can lead to change orders
Design–Build Variations

“Performance DB”

- Measureable performance criteria or objectives for operation, rather than on specific design approaches
- Utilized when an owner has specific performance goals
- Includes standard construction specifications while allowing proposers greater flexibility in the design & approach
- Often requires some level of design completion much like the prescriptive approach (can be as much as 10–30%)
- Design is completed with no input from the owner with the exception of performance objectives detailed in procurement docs
- Can also lead to future change orders
Progressive Design-Build  A New Evolution

- Allows for enhanced owner control of scope, quality, price, & schedule decisions
- Allows for enhanced owner input throughout the project
- Decisions are based on more than construction cost
- Practically eliminates change orders & surprises
- Simple & less costly procurement
- Single Point of Accountability
- Enhanced Risk Allocation
- Quicker, More Cost Effective Project
Progressive Design-Build  A New Way

“Progressive Design-Build”

- Growing in popularity amongst owners & practitioners
- Design to budget
- Distinction begins during procurement (owner will often select based on design-builder’s qualifications
- Qualification based selection allows owner to invest in project vs. lengthy and costly procurement approach. (One-Step Approach)
- Approach leverages benefits of DB and Construction Management at Risk (CMAR)
- Preconstruction services allow construction input into design effort
- Fosters maximum collaborative relationship between owner, engineer & builder
- Results in a more cost effective design from the construction Point of View

Charter Team

1. Owner
2. O & M Team
3. Designer
4. Contractor
Qualification Based Selection

Shortlist Based on Written Technical & Qualifications Submission Only

Oral Interview occurs after Short List

Qualifications evaluation scored based on:
- Written Technical & Qualifications
  - Team Qualifications
  - Key Personnel Experience
  - Previous Similar Project Experience
  - Design Management Approach
  - Project Management Approach
- Oral Interviews (Scenario based interview)

Cost evaluation scored based on:
- Programming Services (Lump Sum)
- Design Builder Management Cost (Lump Sum)
- Overhead and Profit Fee (Percentage of Trade Packages Bid)
Cost Evaluation For Procurement

EXAMPLE COST CALCULATION

Assume 200 Points Awarded for Cost

<table>
<thead>
<tr>
<th>Provided in Proposal by Design Builder</th>
<th>D/B Team 1</th>
<th>D/B Team 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Programming Service (Lump Sum)</td>
<td>$1,000,000</td>
<td>$1,500,000</td>
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<tr>
<td>Design Builder Management Cost (Lump Sum)</td>
<td>$12,000,000</td>
<td>$15,000,000</td>
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<tr>
<td>Overhead &amp; Profit Fee (Percentage of Trade Packages)</td>
<td>5%</td>
<td>7%</td>
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Estimated by Owner for Calculation & Evaluation Purposes. This information is included in the RFQ/P.

| Estimated Trade Package Value (Lump Sum) | $300,000,000 | $300,000,000 |
| Budget for Design Services (Lump Sum) | $10,000,000 | $10,000,000 |

Calculated Overhead & Profit based on fee provided in RFP

| Overhead & Profit Calculated (Lump Sum) | $15,000,000 | $21,000,000 |

| Total Evaluation Cost (Lump Sum) | $338,000,000 | $347,500,000 |
| Percent Difference | 2.81% Higher |
| Percent of Points to be Awarded | 100% | 97.19% |
| Point Awarded base on Evaluation | 200 | 194.38 |
Optimization of Time & Cost
Collaborative Project Delivery Process

- Contributions from Entire Team
- Innovative Solutions
- High Performing Team
- Continuous Improvement
- Shared Team Leadership
- Positive Attitude
- Successful Performance
- High Expectations
- Culture of Collaboration

An Owner With High Expectations
An Exceptional Designer
An Exceptional Builder
A Design-Build Delivery Contract
Structured Collaborative Process

Partnering Program

CMAA Southern California Chapter
Pricing In A Progressive Design–Build

- Guaranteed Maximum Price (GMP) is provided at design completion milestones (30%-60%-90% final)
- Final GMP for continuation is developed between 60–100% design completion
- Competitive trade contractor bids
- Transparent open-book approach
- Lump sum is option if desired
- In the event owner finds the design–builder's (LS or GMP) unacceptable, the owner can opt to proceed in a traditional manner
- Complete flexibility
Guaranteed Maximum Price (GMP)

The GMP is an open book process & transparent to the Owner

Align Risk around Trade Packages

Components of the GMP
- Programming Design Services
- Project Management
- Design
- General Conditions
- Trade Packages
- Exposure Holds
- Design Builder Fee (Includes A/E Fee)
- Design Builder Contingency
- Pre GMP Changes
Data
<table>
<thead>
<tr>
<th>Method</th>
<th>Projects</th>
<th>Average Variance</th>
<th>Change Order Percentage</th>
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<tbody>
<tr>
<td>Design-Build</td>
<td>14</td>
<td>100</td>
<td>4.5</td>
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<tr>
<td>CM Multi-Prime</td>
<td>11</td>
<td>182</td>
<td>7.2</td>
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<tr>
<td>Design-Bid-Build</td>
<td>7</td>
<td>155</td>
<td>10.7</td>
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Building the Team = Success of a Project

Agency Project Manager/Representative
Inspector
Project Inspector & Lab

Architect
Responsible for Design of Project
Contractor/Trade Partners
Building the Team = Success of a Project

Does the team understand: Its Purpose

Does the Team have the right Skill Set?

Does the Team have Proper resources

Are They Motivated?

Is there a Plan?
Progressive DB – “A Refreshing Approach”

- Timely & cost effective delivery
- Greater control of the design decisions impacting, scope, quality, cost & schedule
- Enhanced risk allocation
- Ability to select preferred equipment, trade contractors and vendors
- Guaranteed price either using the GMP or LS approach
- Guaranteed schedule
- Guaranteed performance
- Quicker & more cost effective procurement
Questions?