

2020 Project Delivery Symposium

The Role of Effective Teaming in Managing Risk



The American
Institute
of Architects

Project Delivery

an **AIA** Knowledge Community

Copyright notice

This presentation is protected by US and International Copyright laws. Reproduction, distribution, display and use of the presentation without written permission of the speaker is prohibited.

© The American Institute of Architects 2020



Project Delivery
an **AIA** Knowledge Community

Compliance statement

“AIA Knowledge” is a Registered Provider with The American Institute of Architects Continuing Education Systems (AIA/CES). Credit(s) earned on completion of this program will be reported to AIA/CES for AIA members. Certificates of Completion for both AIA members and non-AIA members are available upon request.

This program is registered with AIA/CES for continuing professional education. As such, it does not include content that may be deemed or construed to be an approval or endorsement by the AIA of any material of construction or any method or manner of handling, using, distributing, or dealing in any material or product.

Questions related to specific materials, methods, and services will be addressed at the conclusion of this presentation.



The American
Institute
of Architects

Project Delivery

an **AIA** Knowledge Community

Learning Objectives

- *Understand where the design risks lies in the Design-Build Project*
- *Impact and risks of the Owners procurement strategies on the design and the team*
- *Understanding the importance of choosing your projects and partners wisely*
- *Building a high-performance team that can collectively and collaboratively identify and mitigate design risks*

Moderator and Distinguished Panelists



Greg Gidez, FDBIA
Hensel Phelps – Moderator
Director of Design Services



Virginia McAllister
AIA DBIA, President
Iron Horse Architects



Deb Sheehan, AIA
Managing Director, BDO
Center for Healthcare
Excellence and
Innovation



Patrick Crosby, PE DBIA
The Crosby Group
Structural Engineers

What we hear.....

- My Design Build partner will not let me access the Owner's team
- My Design-Build partner thinks my E&O insurance is a profit center
- My Design-Build partner does not give me feedback on cost, constructability or schedule
- The Owner is AWOL, not engaged and will not answer questions
- I don't have adequate time to complete the documents
- The design documents do not reflect the scope of the work
- The design documents are late and incomplete
- Designers cannot meet schedules or budgets
- Designers push their own agendas beyond contractual obligations

What we hear.....

- The Owner only needs a Schematic level of documentation to select the winning solution
- The Design-Builder only cares about the bottom line
- The Design-Builder does not understand the design process
- The Design-Builder is only concerned with the schedule

The rowing crew.....

- Understand the rules of the race
- Understand the cadence of the race
- Understanding of the desired outcome
- Understanding of team dynamics
- Understand how to win! How to succeed.
- Can't win unless the TEAM IS ALIGNED!





Crosby Group

Patrick Crosby, SE, DBIA

Hurdles to Know and Clear for Successful DB Projects



Crosby Group

- **\$6B in Design Build Work**
- **International and National DB Projects**
- **IPD, Progressive and Two Step Experience**
- **Private, Federal, State and County DB Experience**
 - **First DB Project in 1988**

Owner vs Contractor Requirements

- First Question: Bridged, Unbridged or Progressive....Stipend?? Pay to play?
- Owners may have limited requirements but....
- The world of BIM
 - Limited time allowance to vet a model
- Designers risk of Contractor costing an incomplete design



[This Photo](#) by Unknown Author is licensed under [CC BY](#)

Level of Documentation

- Design from scratch vs Historical Data
- Specifications may come from Owner
- BIM does not mean buildable
- Level of Design for Pricing – are you involved in determining contingencies



Architects risk - MEP Design Involvement

- MEP Consultants a thing of the past?
- Subcontractors will take risk on limited documentation
- Traditionally a late involvement
- Entire project not fully vetted when submitted

ENGINEER
SOLVING PROBLEMS
YOU DIDN'T KNOW
YOU HAVE
IN WAYS YOU CAN'T
UNDERSTAND

Original Budget vs Real Costs

- Escalation
- Design Contingencies....where do they come from?
- Two Step procurement delays
- Specialty Design Ex: ATFP



Higher Design Fees

- Designer Involvement unlike DBB
- CA fees doubled
- Redesign Costs in contract?
- Pay to Play ...price to lose
- Sell value vs low price

**HOW TO
COMMUNICATE**

**A PRICE
INCREASE**

WITHOUT SPOOKING

~~CUSTOMERS~~

Contractors



Smaller Firms pursuing DB Projects

- Risk vs Reward is higher
- Educated Owner?
- Experienced Contractor?
- Can your firm size survive losing a project?
- E&O Insurance



Design Build Risk Management for Small Business

How to successfully navigate
risk as a small business.



Iron Horse Architects

- Women Owned Architecture Firm
- Practicing Design Build Coast To Coast
- Prime and a Subconsultant
- Delivered Design Build projects with construction costs totaling \$7.5B
- Won 5 national design and Design Build awards



The American
Institute
of Architects

Project Delivery

an **AIA** Knowledge Community



Navigating Risk

- Is Design Build right for your company
- Don't be afraid
- Understand the business of Design Build
- Team structure
- Know your scope and do the math
- Protecting your business



The American
Institute
of Architects

Project Delivery

an **AIA** Knowledge Community



Follow Playground Rules

- Think before you act
- Try something new
- Play safe
- Include others
- Share
- Be kind and respectful

Think before
you act.



Is Design Build right for your company?

- Expertise
- Access to project types
- Access to larger projects
- Access to clients
- It's what everyone is doing

Try something
new.



Don't be afraid.

- Read/review the prime contract that comes with the RFP/Q
- What clauses can be insured
- Read/review the prime's contract
- Ask for a meeting early if you have issues with the contract
- Self insured...what is the risk

Play safe.



Understand the business of Design Build.

- Spend the money to have legal council review your contracts
- Even small firms have the right to negotiate
- Know the value you bring

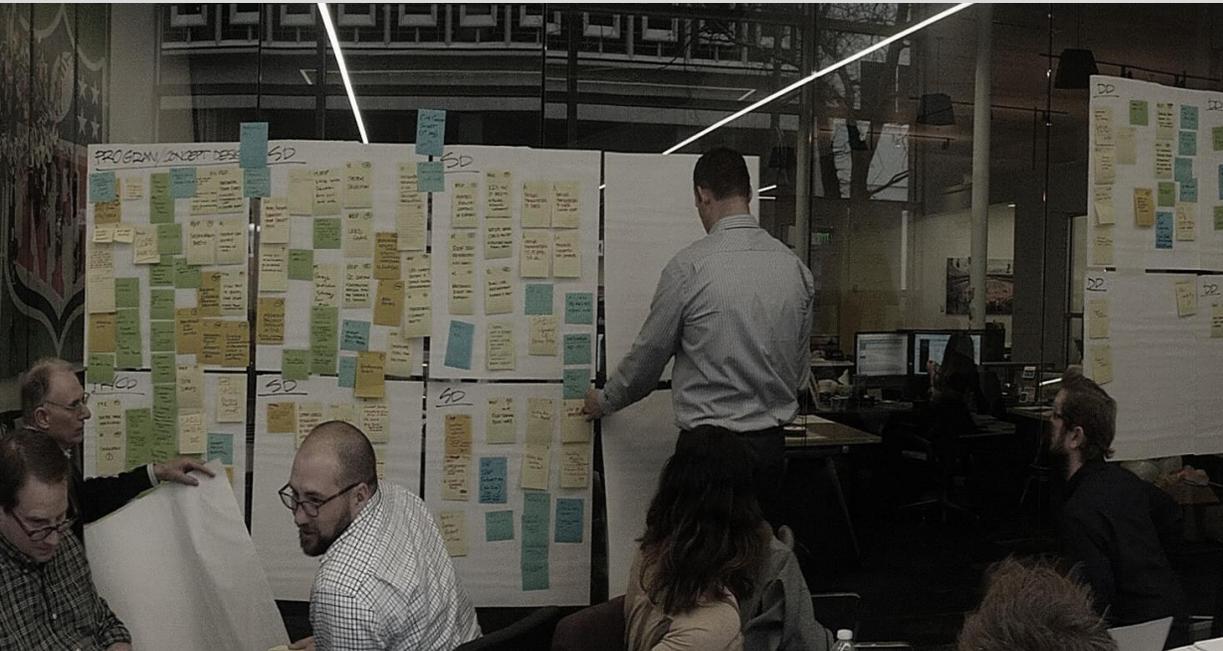
Include
others.



Team Structure.

- Know where you stand
- Are you a third-tier sub
 - Can you wait 120-160 days to get paid
- Do you have the right liability insurance
- Get organized
 - Do you have the processes in place within your company to properly handle documentation, billing, lines of credit, human resources, and legal counsel

Share.



Know your scope and do the math.

- Cash flow
- Schedule
- Pursuit cost
- Project costs
- Liability
- Profit
- Overhead

Be kind and
respectful.



Protecting your business.

- Business is business
- Good business is built out of good relationships
- Good relationships build good projects
- Good projects are fair and balanced
- Have a Memorandum of Understanding (MOU) in place early in the process

A large, 3D BDO sign is the central focus, set against a backdrop of a city street with tall buildings. The sign is made of a light-colored material with dark blue outlines. The background shows a mix of modern glass skyscrapers and older brick buildings. A red vertical bar is positioned on the right side of the image. The overall scene is brightly lit, suggesting daytime.

Role of Effective Teaming in Managing Risk

Deborah Sheehan, ACHE, DBIA
Managing Director BDO USA, LLP



100 YEARS, AND COUNTING.

Founded in 1910, with a network spanning more than 160 countries worldwide, BDO is the 5th largest global network of public finance firms.



INDUSTRY EXPERIENCE

- ▶ Healthcare
- ▶ Technology
- ▶ Commercial Real Estate
- ▶ Manufacturing & Distribution
- ▶ Financial Services
- ▶ Education
- ▶ Private Equity
- ▶ Retail & Consumer Products



700+
ALLIANCE FIRM
LOCATIONS



INDUSTRY GROUPS

\$1.64B

IN REVENUE



60+
OFFICES

**Inc.
500**

THE INC. 500 | 5000
FASTEST GROWING COMPANIES IN AMERICA



7,330
TOTAL PERSONNEL



Top Companies for
Executive Women

**NATIONAL
BEST AND
BRIGHTEST**
COMPANIES
TO WORK FOR

167

COUNTRIES

END-TO-END CAPABILITIES WITH

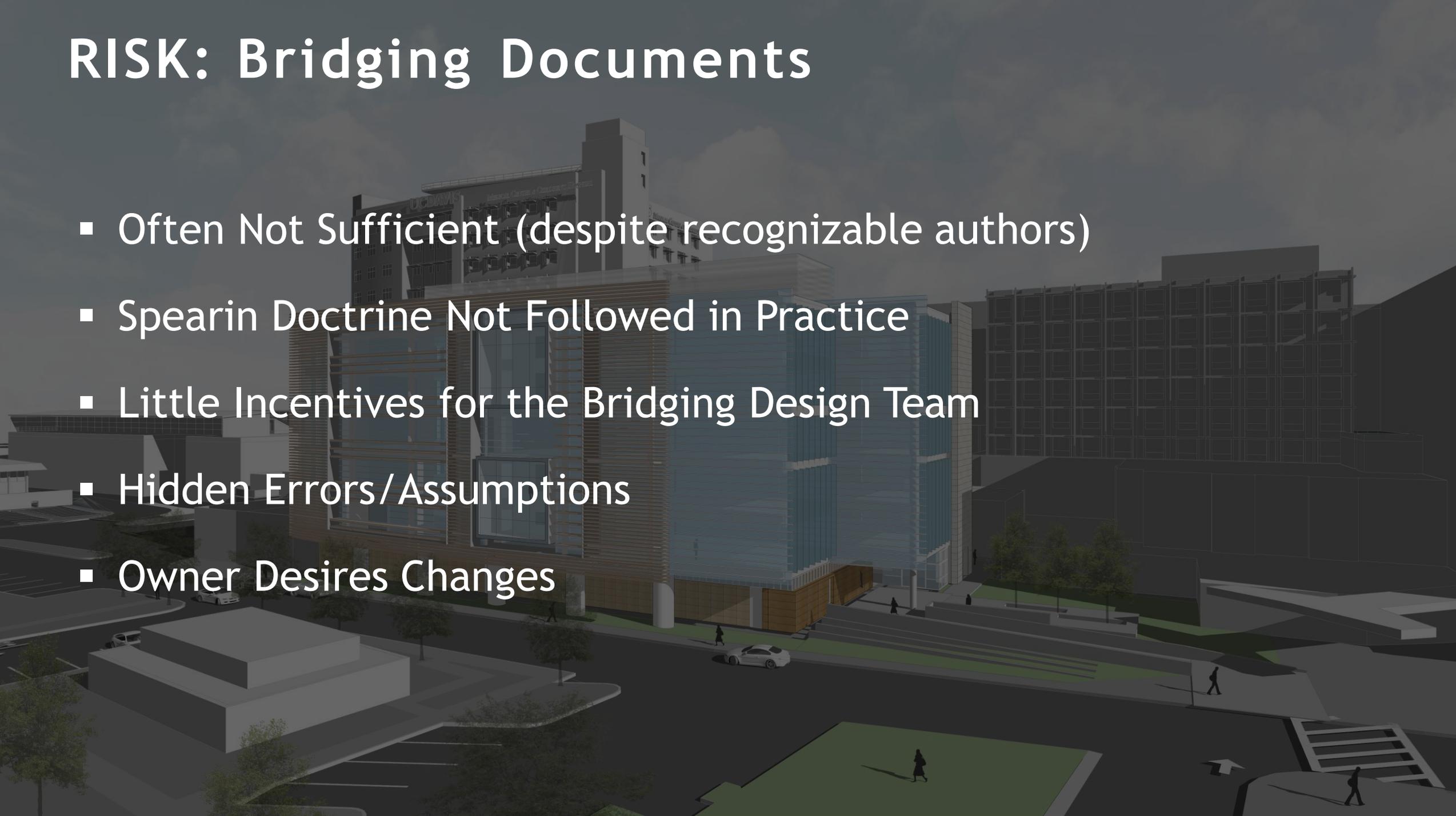
Decades of experience

Top 5 Risks in Design-Build

- Insufficient Bridging Documents
- Design Re-Work Related to Pricing
- P/L Insurance Used Inappropriately
- Unrealistic Schedule or Deliverables
- How is Design Team Success Defined



RISK: Bridging Documents

An architectural rendering of a modern building complex. The central building features a prominent glass facade with a grid pattern and a section with horizontal wooden slats. To its right is a taller, more uniform glass building. The foreground shows a street with a few cars, pedestrians, and a green lawn area. The overall scene is dimly lit, suggesting dusk or dawn.

- Often Not Sufficient (despite recognizable authors)
- Spearin Doctrine Not Followed in Practice
- Little Incentives for the Bridging Design Team
- Hidden Errors/Assumptions
- Owner Desires Changes

Bridging Documents

- Analyze the Documents Before Providing a Fee
- Communicate With Your D/B Partner Any Problems
- Have a Plan With Owner and D/B Team to Address Changes
- Estimating Reserves & Design Fee Reserve

RISK: Design Re-Work

- Lack of a Detailed Cost Model
- Estimating Team is Reactionary not Proactive
- D/B Sub-Contractors' Designers Behind Schedule
- Buy-out Process is out of sequence
- Owner Changes



Design Re-Work

- Choose Your Partner Wisely
- Clear Design Schedule and Decision Milestones
- Communicate with Estimating
- D/B Partner to include Design Fees in Change Costs
- Design Fee Contingency

RISK: P/L Insurance Used Improperly



- Lack of Contingency by D/B
- Bidding from Incomplete Packages
- Coordination Holes Between Design/Build Trades
- Liquidated Damages Clauses
- Increased Insurance Premiums for Consultant Trade Partners

P/L Insurance Use

- Choose your Partner Wisely
- Aim to Help Define the Rest of the D/B Team
- Teaming Agreement Clauses
- Design Responsibility Matrix (Define Who is Responsible)
- Limit Damages to Actual Damages

RISK: Unrealistic Schedule/Deliverables



- Schedules authored by D/B in a vacuum
- Insufficient Quality Control Time
- Insufficient Development of Design by Other Trades (Coordination)
- Insufficient Access to the Owner/Decision Makers
- Dozens of Procurement Packages

Unrealistic Schedule/ Deliverables

- Choose your D/B partners and Trade Partners Wisely
- Participate Early in Schedule Development
- Clear Expectations—Define Content of Deliverables
- Have a Clear Design Schedule—Vetted by D/B and Owner
- Document Control—Limit Design/Procurement Packages

RISK: Design Team Success Defined

- Future References Tied to D/B Team Success
- Left at the Altar (Business Decision by Others)
- Project Success Dependent on Elements Beyond our Control
- Not the Prime Contract Holder
- D/B unfamiliar with Design Leader

HARBOR-UCLA MEDICAL CENTER COUNTY OF LOS ANGELES

Design Team Success Defined

- Mentor Your Partner (Individuals)
- Teaming Agreements (@ Procurement/Stipends)
- Speak Up & Participate
- Structure Fee to Allow Participation in CA Phase

Key Take-aways From Conversation

- Balanced risk and reward
- Teaming agreements/MOU's
- Educated in DB Best Practices
- Partnerships and relationships matter
- Spearin Doctrine – understand it
- Contract – understand before an issue
- Aligned expectations
- Connect Estimators to the Designers
- Criteria compliance
- Alternate technical concepts – how discussed, graded?
- Risk managed by those best equipped to manage
- Fair and equitable fees, contingencies
- Conceptual estimates with A/E input
- Allowances and contingencies understood
- Reputation of the Owner, partners
- Owners vision understood
- Timely payments
- Planned omissions vs. missed scope
- Pre-qualify company, qualify individuals
- Standard of Care, negligence

INTEGRATION IS A TEAM SPORT

*When Done
Right...*

*Its POETRY IN
MOTION*



The American
Institute
of Architects

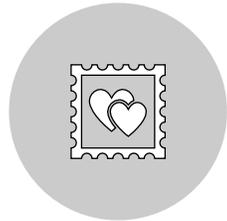
Project Delivery

an **AIA** Knowledge Community

Words of Wisdom



Pick your partners wisely!



Don't fall in love too soon! Choose projects for the right reason



The owner matters big time!



What makes your approach so attractive?
What are the Teaming Arrangements?



Follow DBIA's Design-Build Best Practices.

Questions



**The American
Institute
of Architects**

Project Delivery

an **AIA** Knowledge Community



**The American
Institute
of Architects**

Project Delivery

an **AIA** Knowledge Community

Key Take – Away's

- Choose your Design-Build partners wisely
- Choose your Owner and their project wisely
- Educated and Understand Design-Build best practices
- Your partner is educated in DB Best Practices
- Team alignment achievable
- Mental shift from adversarial relationship
- What's best for the project is best for the people