# ALTERNATIVE DELIVERY: BEYOND DESIGN-BUILD

**PRESENTED BY:**
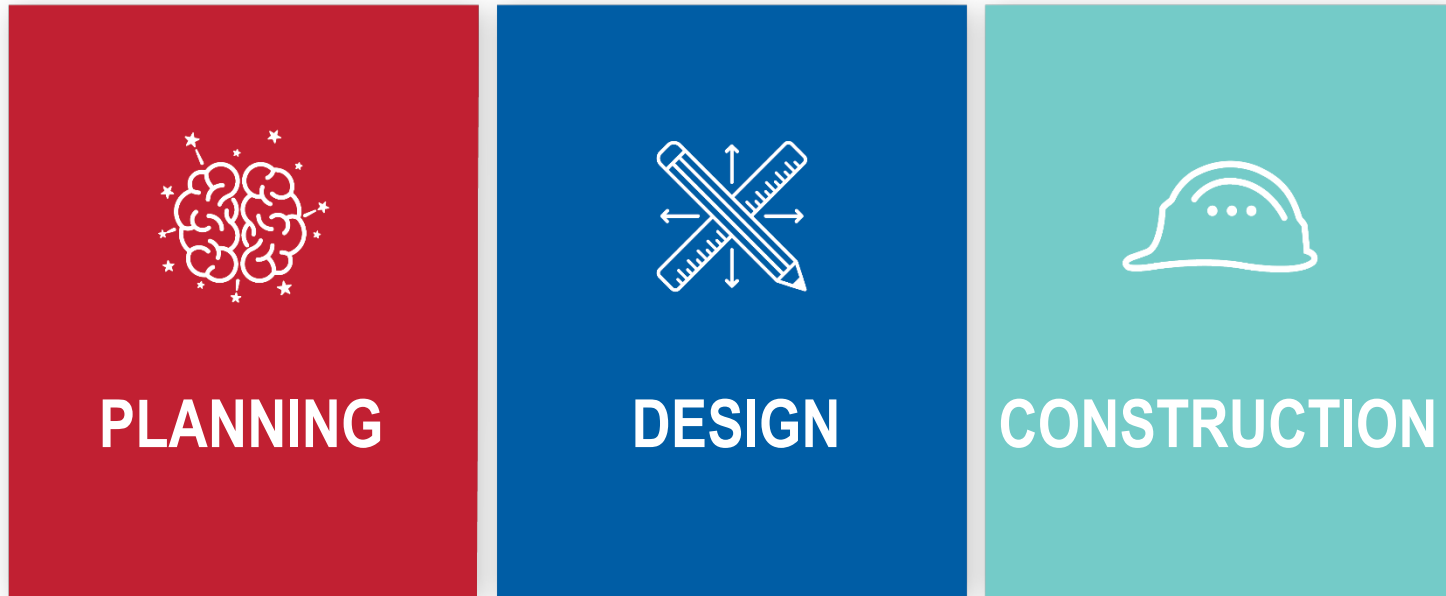Steve Davidson, PE & William Stringer, PE

AMERICAN
**STRUCTUREPOINT**
INC.

# DESIGN-BUILD HISTORY

## PROJECT DELIVERY IS A COMPREHENSIVE PROCESS INCLUDING:
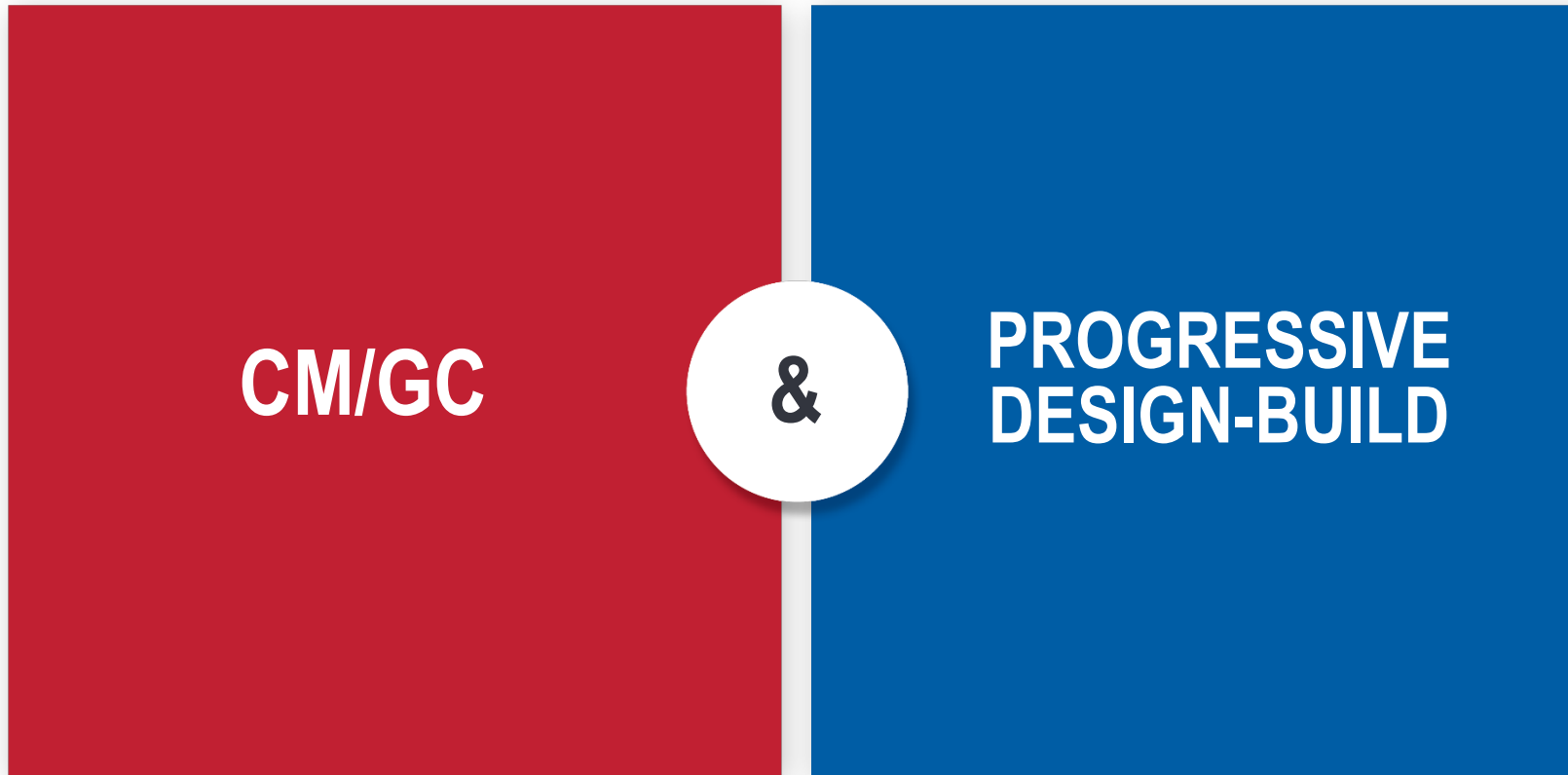
**PLANNING**

**DESIGN**

**CONSTRUCTION**

- Currently 40% of non-residential projects are delivered via design-build. (DBIA)

# DESIGN-BUILD IS BEST WHEN:

- ☑ Scope is well defined
- ☑ Prescriptive specifications are okay
- ☑ Procurement schedule allows for ATCs
- ☑ Risk easily identified and assigned

# PROGRESSIVE CONTRACTING

**CM/GC** **&** **PROGRESSIVE DESIGN-BUILD**

# PROGRESSIVE CONTRACTING IS BEST WHEN:

- ☑ Unknown or not fully defined scope
- ☑ Unknown schedule
- ☑ Unidentified risk or risks can't be easily assigned
- ☑ Constructability and material concerns
- ☑ Public engagement or public involvement needed for decisions

# CM/GC & PROGRESSIVE DESIGN-BUILD



OWNER

DESIGNER ... CM/GC

**CM/GC CONTRACT STRUCTURE**

OWNER

DESIGNER/CONTRACTOR
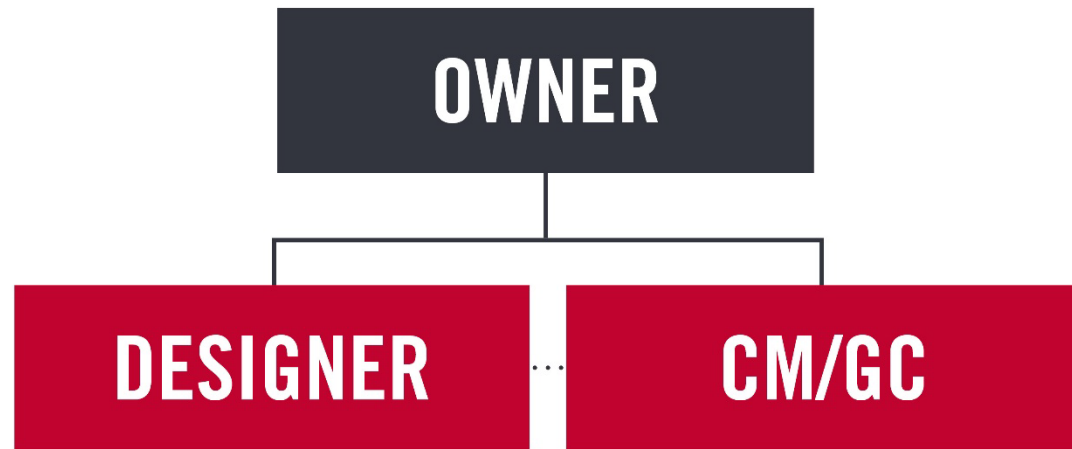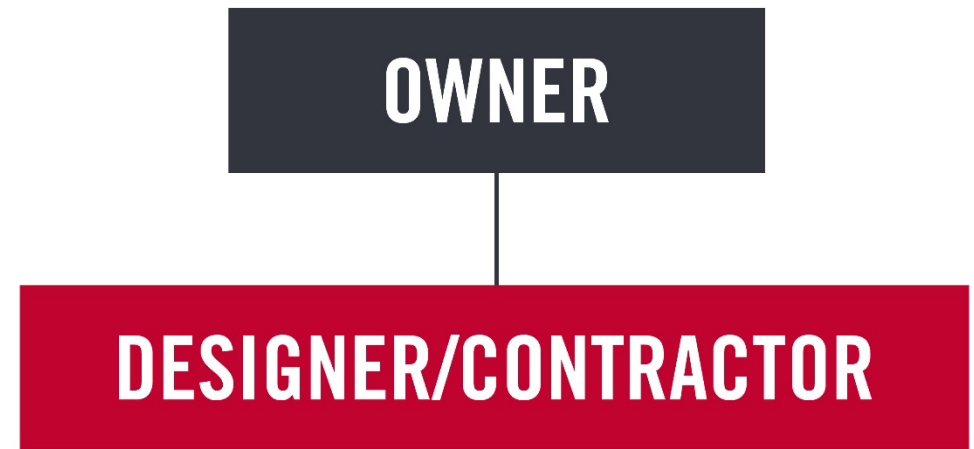
**PDB CONTRACT STRUCTURE**

# BENEFITS OF PROGRESSIVE CONTRACTING

Less investment in proposal process

Compensation for pre-construction work activities

Greater collaboration

More opportunity for innovation

# BENEFITS OF PROGRESSIVE CONTRACTING

Greater flexibility
with work packages

Pricing transparency
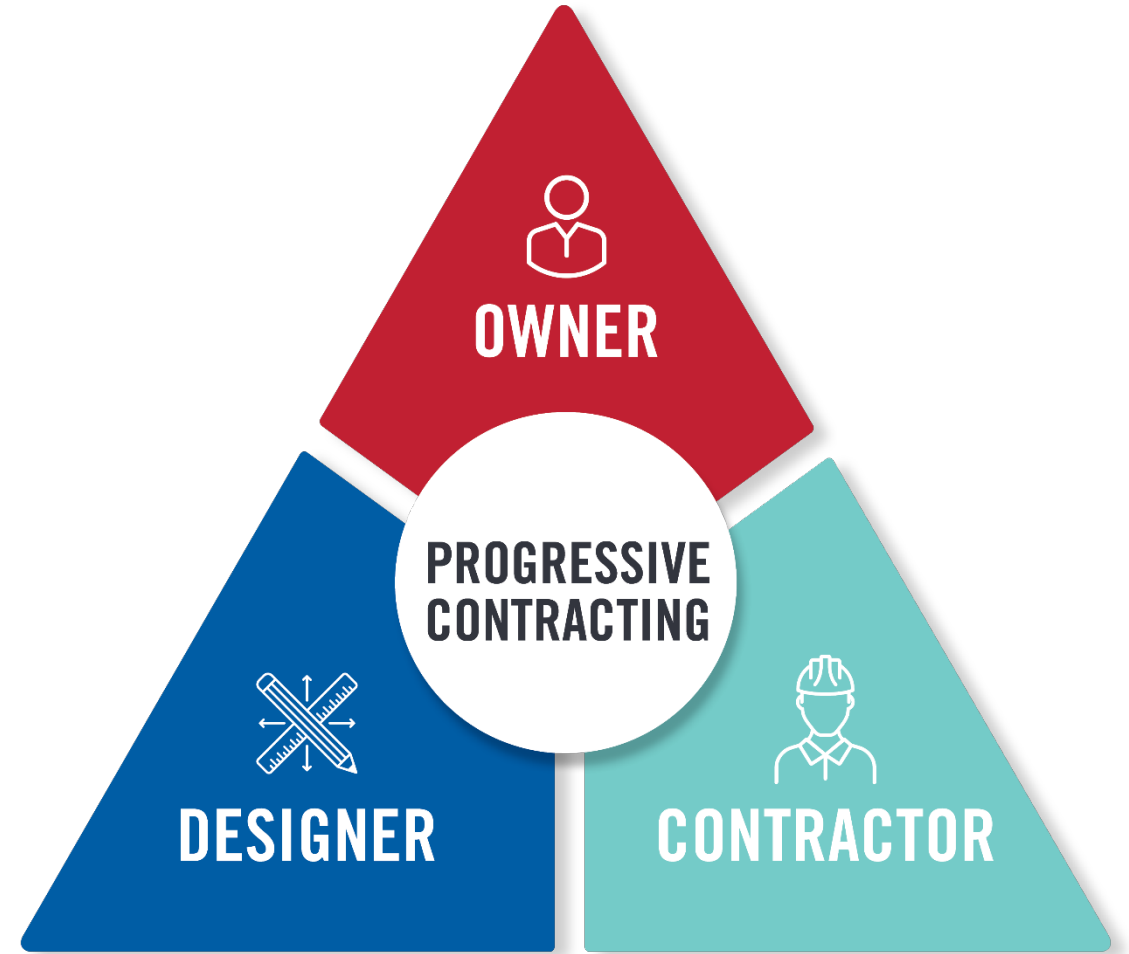with open book
approach

Better
risk management

# PROCUREMENT – TEAM SELECTION

- ☑ Qualifications
- ☑ Past experience
- ☑ History
- ☑ Collaboration
- ☑ Open book pricing
- ☑ Pricing (CRF 636) "Reasonable Test"

# PROCUREMENT – TEAM SELECTION

- ☑ Qualifications
- ☑ Past experience
- ☑ History
- ☑ **Ability to work collaboratively to solve challenges**
- ☑ **Understanding of and willingness to participate in open book pricing process**
- ☑ Pricing (CRF 636) "Reasonable Test"

# PRECONSTRUCTION PHASE

- Compensation

- Teamwork

- Constructability reviews

- Risk assignment

**BENEFITS**
- Optimize the construction
- Optimize staging and sequencing
- Transparent risk pricing

# PRECONSTRUCTION PHASE – CONT.

- Project scoping, sequencing, and schedule

- Determine buildable units

- Packaging

- Risk register/mitigation

- Price reconciliation

**MILESTONES**

- Proof of Concept (30%)
- Intermediate Design (60%)
- Pre-Final – used for establishment of final pricing (70%) [GMP or Lump Sum]

# MILESTONES AND RISK REGISTER

- Validate assumptions and determine risk

- Risk workshops and risk register allow:
  - Transparency in pricing
  - Mitigation of costs and schedule impacts

**RISK ASSIGNMENT**

- Contractor: Included in price but transparent
- Owner: Uncapped risk relief
- Shared: Both capped and uncapped relief

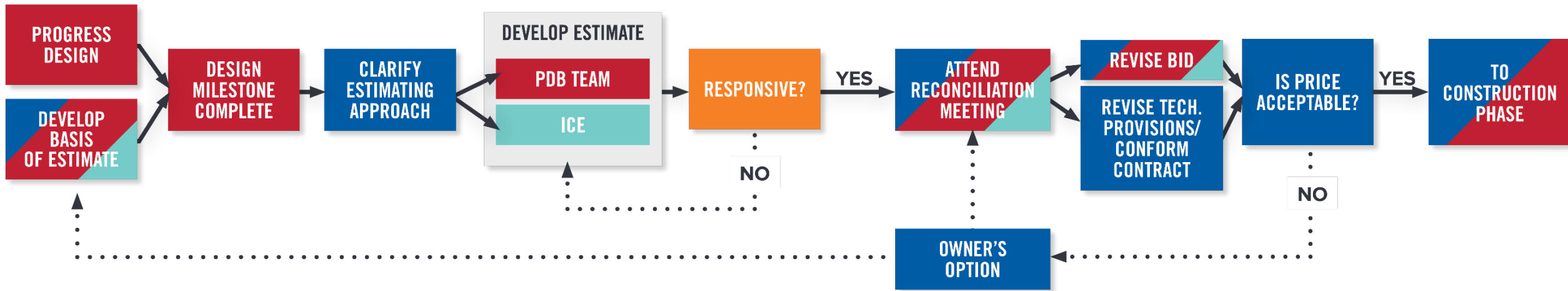# ROLE OF INDEPENDENT COST ESTIMATOR (ICE)

- PROTECT PUBLIC INTEREST
- PARTICIPATE DURING MILESTONE PRICING
- DEVELOP RECONCILIATION ESTIMATES
- TASK FORCE MEETING PARTICIPATION

# PRICING APPROACH (PROGRESSIVE DESIGN-BUILD)

# OFF RAMPS

**CM/GC MODEL:**

- Owner may terminate the CM/GC contract
- Owner may retain CM/GC contract but let packages use traditional Design-Bid-Build

**&**

**PROGRESSIVE DB MODEL:**

- Owner may terminate the DBA
- If assignment provisions are in the DBA, can retain designer and let project traditional DBB
- Owner could hire a designer to complete design

# CONSTRUCTION PHASE

- Final design and RFC plans
- Payment method identified during pre construction phase:
  - GMP paid based on bid items or T&M
  - Lump sum (schedule of values)

**CRITICAL IF CONSTRUCTION WORK IS AUTHORIZED OVER MULTIPLE PRICING PACKAGES:**

- Pricing/scope/schedule can be agreed in one or more pricing packages
- Pricing strategies include updated opinion of probable construction cost to verify the project does not exceed the budget

Once Construction Phase begins, project functions like a traditional Design-Build project

# DELIVERY METHOD COMPARISON

**Design-Bid-Build**
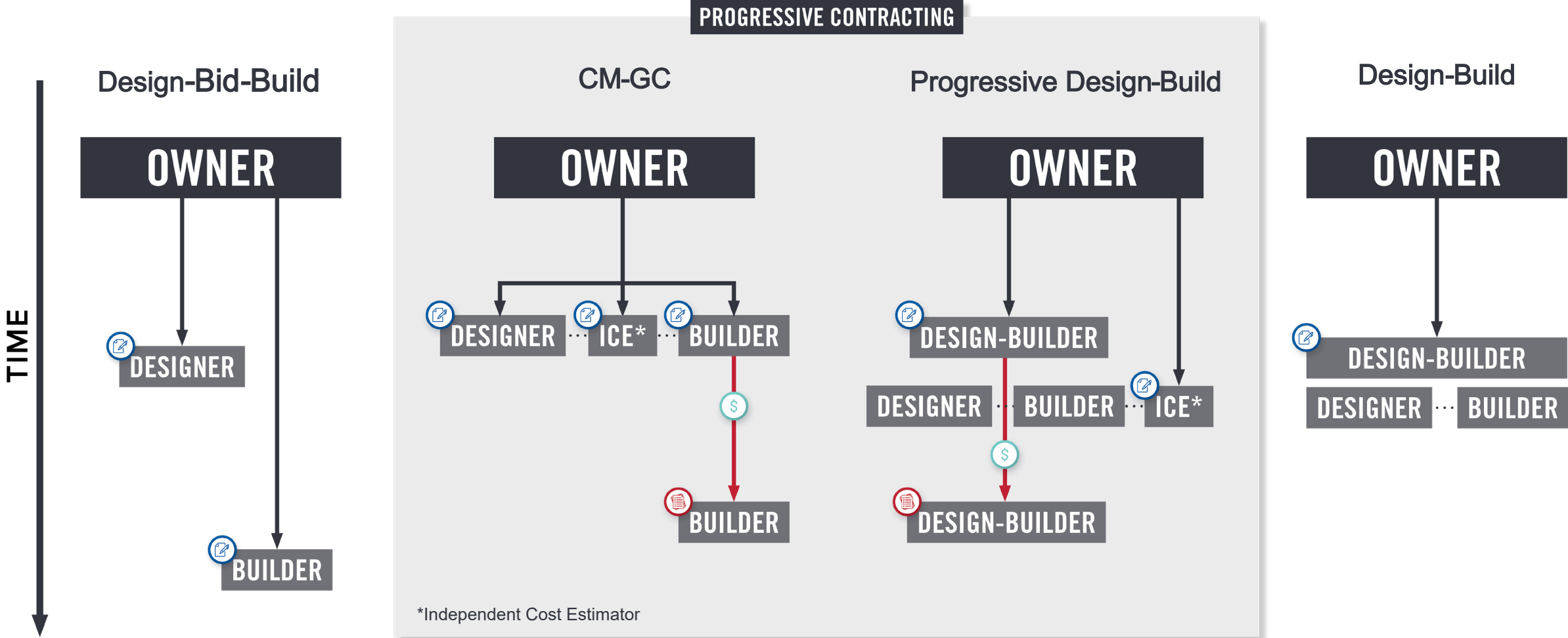
Select Designer | Design | Select Builder | Construction

**CM-GC**

Select Designer & Builder | Collaborative Design

Price Negotiations | Construction

TIME SAVINGS

**Design-Build**

Select Design-Builder | Design

Construction

TIME SAVINGS

**Progressive Design-Build**

Select Design-Builder | Collaborative Design

Price Negotiations | Construction

TIME SAVINGS

# DELIVERY METHOD COMPARISON



**PROGRESSIVE CONTRACTING**

Design-Bid-Build     CM-GC     Progressive Design-Build     Design-Build

TIME

OWNER    OWNER    OWNER    OWNER

DESIGNER

DESIGNER   ICE*   BUILDER

DESIGN-BUILDER

DESIGNER   BUILDER   ICE*

DESIGN-BUILDER

DESIGNER   BUILDER

BUILDER

BUILDER

DESIGN-BUILDER

*Independent Cost Estimator

Contract Signed    Scope & Price Negotiations    Construction Phase Amendment    Collaborative Relationship

# CONCLUSIONS

- Progressive contracting and alternative delivery are here to stay
- Must be used in the right application
  - Does not replace traditional DBB or even low bid DB for straight forward projects
- Must have an engaged owner
- No delivery model replaces good planning and estimates
- Maximum flexibility in Progressive Contracting
- Only works with good partners

# CONTACT US

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# THANK YOU!