

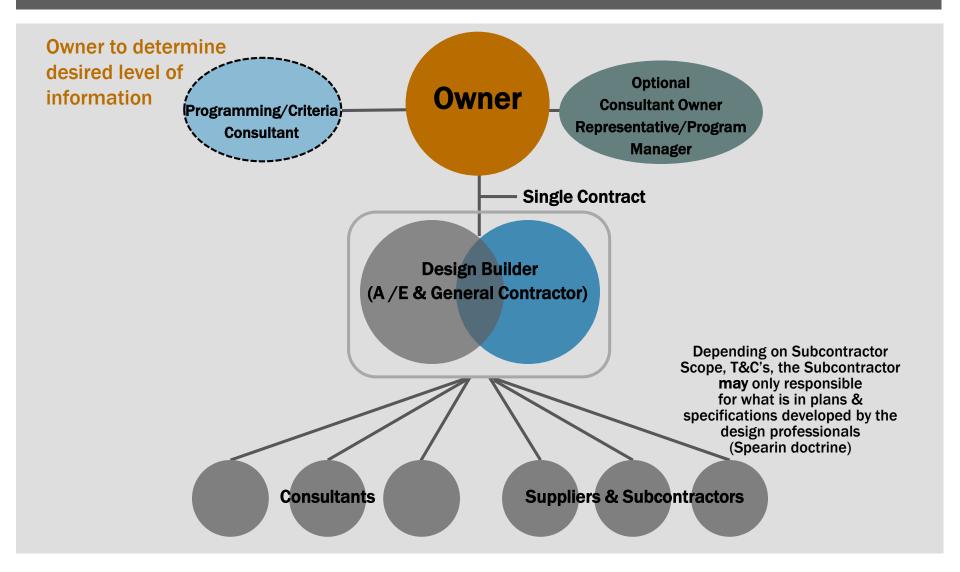
Progressive Design Build

Bonnie Khang-Keating, Smith Group JR Architects Rebekah G. Gladson, ANSER Advisory Cathy Orquiola, PCL Construction

Progressive Design Build

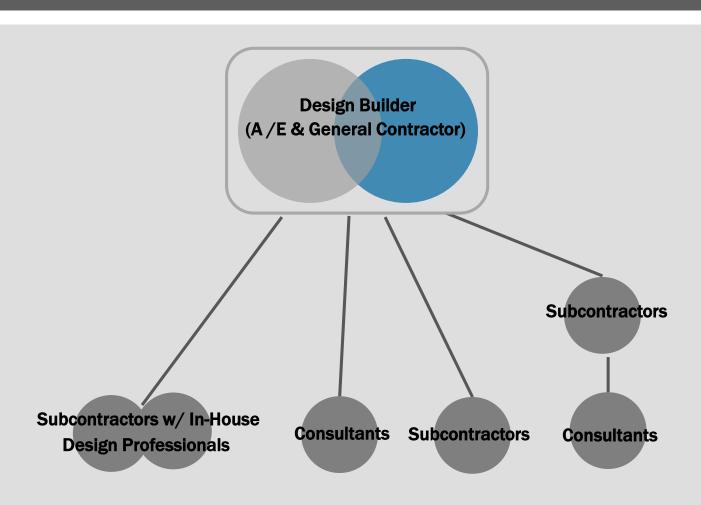
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DESIGN BUILD RELATIONSHIPS





DESIGN BUILDER RELATIONSHIP WITH CONSULTANTS/SUB CONTRACTORS



DESIGN BUILD PROCESS

GMP BID/ LUMP SUM Proposal \$MAC













Owner
Develop
Program

Pre-qualify D-B Teams

Proposal Phase

Evaluation Process

Award Part 1

Award Part 2

Programming

Preliminaries

Development
Off Site /
Foundation
Package / Etc.

Construction
Drawing &
Construction

PROGRESSIVE DESIGN BUILD PROCESS

(SIMPLIFIED DIAGRAM)















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Proposal Phase

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Award Part 1

Award Part 2

Programming ?? *

Note: DB Team can also provide Programming Services Program Validation & Alignment of Target Value Budget & Development of Design/Drawings to allow GMP or Lump Sum Construction
Drawing &
Construction

FIXED PRICE VS PROGRESSIVE

Fixed Price

- Known cost at time of selection
 - Cost may be to a pre-established maximum allowable cost (MAC)
- Involvement of Design Builder during development of design
- Benefit of multiple design solution and innovation
- Owner must define program and design criteria to minimal level
- Cost significant factor in selection
- Significant investment by DB Teams in selection process
- Stipend is required

FIXED PRICE VS PROGRESSIVE (cont'd)

Progressive

- Final Cost established after selection of DB Team
 - Target Value Design budget may be established prior to selection
 - GMP or Lump Sum
 - Need to clearly define components of GMP or Lump Sum
- Involvement of Design Builder during the development of design
- Lower cost of procurement (Specifically A&E)
- Open book on cost estimating
- Cost is not as significant of a factor in selection

FIXED PRICE VS PROGRESSIVE SIMILARITIES & DIFFERENCES

FIXED PRICE DESIGN-BUILD

Known Cost at time of selection,

Involvement of Design Builder during development of design

Benefit of multiple design solution and innovation through competition

Owner must define program and design criteria to minimal level

Cost significant factor in selection

Significant investment by DB Teams in selection process

PROGRESSIVE DESIGN-BUILD

Final Cost after selection of DB Team, Open book on cost estimating

Involvement of Design Builder during the development of design

Owner involved in the design solution options during concept stage

Design-Builder is engaged at the preliminary planning level

Cost is not as significant of a factor in selection

Lower cost of procurement (Specifically A&E)

PROJECT DELIVERY METHOD

- Establishes when the parties engaged in a contract,
- Influences the choices for contractual relationship among the parties,
- Influences the programming and design process,
- Influences ownership and impact of changes and modification of project cost & schedule.

PROCUREMENT & CONTRACTUAL RELATIONSHIPS

- Relationship between owner, design professionals, contractors
- Responsibility of each party
- Liability of each party
- What this means to owners
- Design, cost and schedule



DESIGN BUILD CONTRACTUAL RELATIONSHIP

Characteristics

- Integrated process-overlapped design & construction
- Often fast tracked
- Two prime players: Owner & Design Build entity
- Entity can take on many forms
- One contract
 - Owner to Design Builder

Responsibilities

Owner Program, design direction, performance

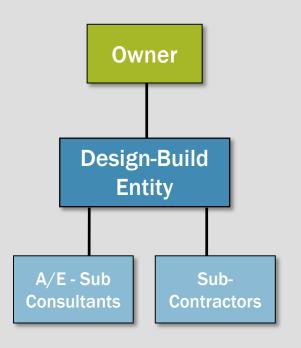
requirements, & finance*

Design-Builder Design & Construction. Can

include programming & post construction

services

Note: D-B can expand services to include programming, finance, operate, etc.



PUBLIC PROCESS SUMMARY

RFP Development

Develop RFP Front End:

- Instruction to Proposers
- Technical Evaluation and Scoring Criteria
 - Project Schedule and Phasing
 - Fee Structure and Allowances
 - Fee Worksheet and Ultimate Cost

Develop Contract Documents:

- General and Supplementary Conditions
 - Project Requirements (Division 1)

Develop Scope of Work:

- Project Site, Program, GSF
- Project Budget & Target Value Price/Budget & Process
 - Project Deliverables & Expectations







- Lessons Learned from similar projects inhouse and others
 - Peer / Subject Matter / Counsel Input
 - Stakeholders, Facilities Input
 - Industry Outreach and Input

Approvals

Board Review and Approval of RFP Process, Selection and Project Delivery method

Board Review and Approval of Project Budget

Team Selection

3-step Selection based Single Submission by Design Build Team

- TechnicalQualification (Pass/ Fail and Scoring)
- PROJECT TEAM INTERVIEW
- Fee Proposal (Sealed Envelope)

Each Public Owner will have a processes or guidelines for Approvals & Team Selection.

Adapt process to Owner requirements.

PRIVATE PROCESS SUMMARY

Develop RFP Front End:

- Instruction to Proposers
- Technical Evaluation and Scoring Criteria
 - Project Schedule and Phasing
 - Fee Structure and Allowances
 - Fee Worksheet and Ultimate Cost

Develop Contract Documents:

- General and Supplementary Conditions
 - Project Requirements (Division 1)

Develop Scope of Work:

- Project Site, Program, GSF
- Project Budget & Target Value Price/Budget & Process
 - Project Deliverables & Expectations







- Lessons Learned from similar projects inhouse and otherwise
 - Peer / Subject Matter / Counsel Input
 - Stakeholders, Facilities Input
 - Industry Outreach and Input

Board Review and Approval of RFP Process, Selection and Project Delivery method

> Board Review and Approval of Project Budget

3-step Selection based Single Submission by Design Build Team

- TechnicalQualification (Pass/ Fail and Scoring)
- PROJECT TEAM INTERVIEW
- Fee Proposal
 (Sealed Envelope)

2 STEPS POST SELECTION

Step 1

- Validation of Program
- Alignment of Scope and Budget
- Development of Basis of Design (May be provided by Owner)
- Development of Design to Specified Level (Design Development, 50%, 60%...)
- Development of GMP or



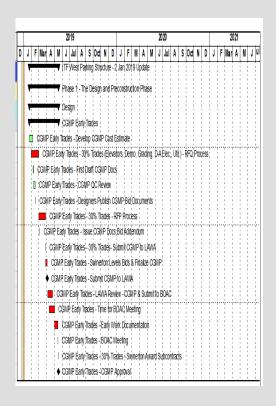
OFF RAMP if Owner & Design Builder cannot Align

Step 2

- Completion of Design & Construction Documents
- Construction & Commissioning
- Inspection
- All Close-Out & Transition Processes & Requirements

TIMING OF SUB-CONTRACTOR INVOLVEMENT

- Engage Key sub-contractors from the start
 - Identifying key sub-contractor trades depend on type of project.
 - When Possible, engage major sub-contractors during the procurement RFQ/RFP process of the Design-Build Team
 - Ensure key subs are engaged prior to completion of 60% design documents (100% DDs – 50% CDs depending on project type)
- Provides truly integrated design development and best outcome of the Progressive DB Process
 - Higher level of innovation to meet desired performance
 - Better cost control to attain Target Value Budget
 - Lower Risk for unknown/unbought scope with early participate in design assist or design effort



PROGRESSIVE DESIGN BUILD PROCESS

(SIMPLIFIED DIAGRAM)















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COLLABORATIVE 360 DEGREE RISK MANAGEMENT

Scope

Budget

Quality

- Transparent and Collaborative Risk Identification
- Proactive and Continuous Risk Assessment
- Timely and Measurable Risk Mitigation

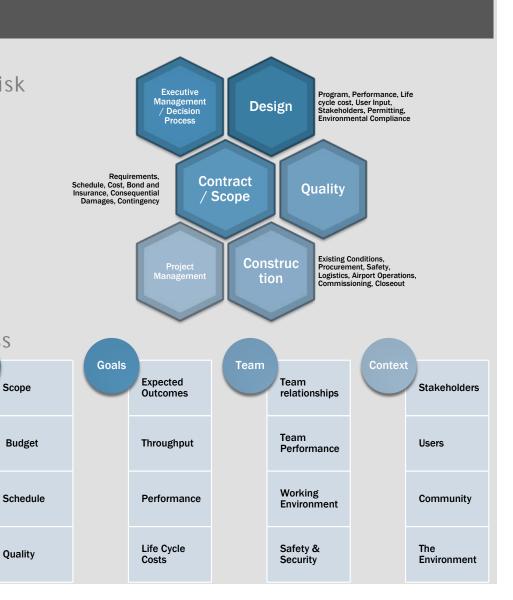
Informed Decision Making Pracess Metrics

Best Practice Tools

Integrated Workflows

Decision Making

Communications



SINGLE MOST IMPORTANT DISTINCTION

