# Architect's Perspective

DESIGN BUILD DONE RIGHT
WRNSSTUDIO

John A. Ruffo FAIA, RIBA, Founding Partner





# WRNS STUDIO DESIGN-BUILD EXAMPLES

#### **COMPETITION**

- Skyline College
   Administration,
   Cosmotology &
   Classroom Building
- UCSF Mission Bay Hospital Parking Structure
- UCSF Mission Bay Block 25A Faculty Office Building
- UC Merced Recreation Center North

#### **BRIDGES**

- LBNL Advanced Light Source User
   Support Building
- SLAC Research Support Building (Bldg. 052)
- UC Davis Segundo
   Student Services Building

### DESIGN-BUILD CONTRACT

- Watsonville Water
   Resource Center
- Mission Bay Block 27 Parking Structure

# WHY IS A DESIGN-BUILD COMPETITION ATTRACTIVE?

#### **TO OWNER**

- Faster to market
- Increased Value
- Know what they are getting for available dollars

#### **TO BUILDER**

- Early involvement to allow for design and budget input
- Early project planning to encourage creative solutions
- Subjective contract award – lowest final cost objective

#### **TO ARCHITECT**

- People we like working with – mutual relationship
- Opportunity to team with builder
- Design experience vs. project type deep experience
- Beneficial economics (if you're good at it)

## WHY IS A DESIGN-BUILD COMPETITION ATTRACTIVE?

- One team with common goals across all entities
- Single source contact & accountability
- Continuity of team across entire project
- Increased collaboration
- Active client participation
- Enhanced open and honest communication
- Increased value

## WHEN IS A DESIGN-BUILD COMPETITION APPROPRIATE?

PROJECT TYPE	DESIGN BUILD COMPETITION CANDIDATE	COMMENTS / ISSUES
GARAGES	Yes	Simple program, systems
STUDENT HOUSING	Yes	Easier to define standards, cost competitive
STUDENT SERVICES	Yes	Typically simple program, good design opportunity
RECREATION	Yes	More complex, but still a good candidate, good design opportunity
ACADEMIC BUILDINGS	Maybe	Depends on complexity of program
LABORATORY BUILDINGS	Maybe	Programmatically complex, systems complexity, heavy user involvement
MEDICAL BUILDINGS	Sometimes	Depends on complexity of program
NEW CONSTRUCTION	Yes	Fewer constraints
RENOVATIONS	Maybe	Too many issues / unknown to define in criteria BOD

## DESIGN-BUILD COMPETITION VS. BRIDGE ELEMENTS OF THE PROCESS

PROCESS	DESIGN BUILD COMPETITION	BRIDGE
RFP	<b>✓</b>	✓
BASIS OF DESIGN	<b>✓</b>	Specifications
PROGRAM	<b>✓</b>	✓
PLANS	•	From complete schematics to design development
CONCEPTUAL DESIGN	Sometimes	✓

## DESIGN-BUILD COMPETITION VS. BRIDGE TIME COMPARISON

TIME	DESIGN BUILD COMPETITION	BRIDGE
STIPEND	<b>V</b>	•
LENGTH OF RFP TIME	45-90 days	30-45 days
OVERALL TIME	Accelerated	Traditional
LENGTH OF TIME TO PRODUCE RFP	60-90 days	90-150 days

## DESIGN-BUILD COMPETITION VS. BRIDGE REQUIRED ELEMENTS

ELEMENTS	DESIGN BUILD COMPETITION	BRIDGE
BID PRICE / STIPULATED SUM/ MAXIMUM ALLOWABLE COST	V	V
TECHNICAL CRITERIA	V	•
SCHEMATIC PLANS / ELEVATIONS	V	•
DESIGN NARRATIVE	V	•
MODELS/ RENDERINGS	V	•

## DESIGN-BUILD COMPETITION VS. BRIDGE SCHEDULE COMPARISON

SCHEDULE	DESIGN BUILD COMPETITION	TRADITIONAL DELIVERY
RFQ PREPARATION	8 weeks	8 weeks
PROGRAMMING	12 weeks	12 weeks
ISSUE RFP	4 weeks	4 weeks
DESIGN (TO BID/AWARD)	12 weeks	52 weeks
DESIGN-BUILD AWARD	4 weeks	0 weeks
AGENCY REVIEW / PERMITS	8 weeks (Agency review/permits post award/during contruction)	8 weeks
BIT/AWARD PERIOD	0 weeks	8 weeks
DESIGN AFTER AWARD – PRE CONSTRUCTION	8 weeks (Early construction start after completion of design development)	0 weeks
DESIGN AFTER AWARD – DURING CONTRUCTION	12 weeks	0 weeks
CONSTRUCTION	48 weeks (Construction expedited with early subcontractor involvement)	52 weeks
COMMISSIONING & OCCUPANCY	4 weeks	4 weeks
TOTAL TIME IN WEEKS	100 weeks (Not all durations are additive)	148 weeks
TOTAL TIME IN MONTHS	23 months	34 months

## THE RISK / REWARD ANALYSIS COST COMPARISON – DESIGN-BUILD VS. TRADITIONAL

COST	DESIGN BUILD COMPETITION	TRADITIONAL DELIVERY
CONSTRUCTION COST	\$10,000,000	\$10,000,000
DESIGN / CONSTRUCTION CONTIGENCY	\$500,000	-
GMP CONTINGENCY	-	\$300,000
OWNER'S CONTINGENCY	\$200,000	\$500,000
DESIGN FEES	\$800,000	\$800,000
SUCCESS FEES	\$100,000	-
OWNER'S CONSULTANTS	\$200,000	\$200,000
MAXIMUM ALLOWABLE COST	\$11,800,000	\$11,800,000
OWNER'S COSTS AT 25%	\$3,500,000	\$3,500,000
TOTAL PROJECT BUDGET	\$15,300,000	\$15,300,000