Design-Build Project Delivery Method Overview

Board Meeting
February 26, 2019

Santa Clara Valley Water District

Presentation Outline

1. Design-Build (DB) Definition and Background

2. Contracting Relationship: Design-Bid-Build (DBB) vs. DB

3. Key Differences: DBB vs. DB

4. Drivers for using DB

5. Proposed Projects for DB Delivery Method

6. Project Delivery Process Chart

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Design-Build Definition and Background

▶ **Design–Build**

  ➢ The design and construction services are contracted to a single entity

▶ **Benefits**

  ➢ One contract to cover both design and construction
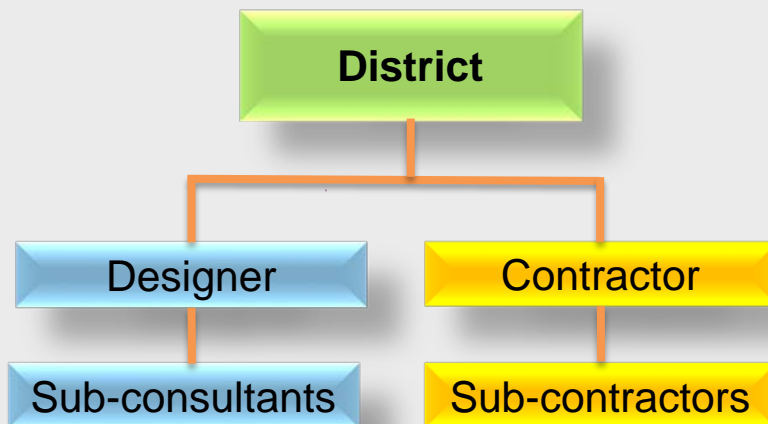
  ➢ Single point of responsibility and accountability

▶ **District Authorization**

  ➢ Public Contract Code Section 22162.5

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3

Contracting Relationship: DBB vs. DB

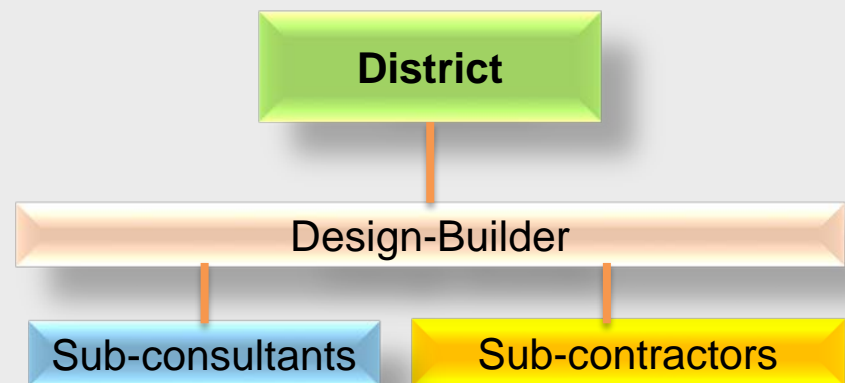## Design-Bid-Build

- <u>Three prime players:</u>
  - District, Designer, Contractor
- <u>Two separate contracts</u>
  - District to Designer
  - District to Contractor

Design-Build

- <u>Two</u> prime players:
  - District, Design-Builder
- <u>One</u> contract
  - District to Design-Builder

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Key Differences: DBB vs. DB

Topic	Design-Bid-Build	Design-Build
Number of contracts	1) Designer 2) Contractor	One contract *(single point accountability)*
Project award	Low bid	Best value or low bid, owner decides
Contract	Prescriptive	Performance-based
Work phasing	Design must be fully complete before construction begins	Design and construction can overlap
Price certainty	No builder estimates of construction cost during design; Lowest bid plus change orders	Early knowledge of construction cost; Guaranteed Maximum Price plus change orders

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Potential for Changes

- Typical change orders could result from:

  - Owner-directed changes in scope or requirements (e.g. District-established constraints such as plant or process shutdowns)

  - Requirements imposed by third parties (e.g. permitting agencies, regulators, utility companies)

  - Unforeseen site conditions

- Design-Build: Fewer change orders related to design/construction disconnects (e.g. constructability and coordination issues) are expected.

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Drivers for Using Design-Build

- Single-point accountability

- Builder is involved in design process

- Designer-Builder collaboration can result in better quality

- Potential for innovation

- Speed of delivery (potential time and cost savings)

- Price certainty

- Lower costs (based on industry-wide experience)

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Attachment 1
Page 7 of 9

Staff Recommends using DB for :

1. Coyote Pumping Plant Adjustable Speed Drive Replacement ($17M)

2. Vasona Pumping Plant Upgrades ($25M)

Why?

- Take advantage of legislative authorization

- Potential for time and cost savings

- Improve project coordination

- Gain experience beginning with smaller projects

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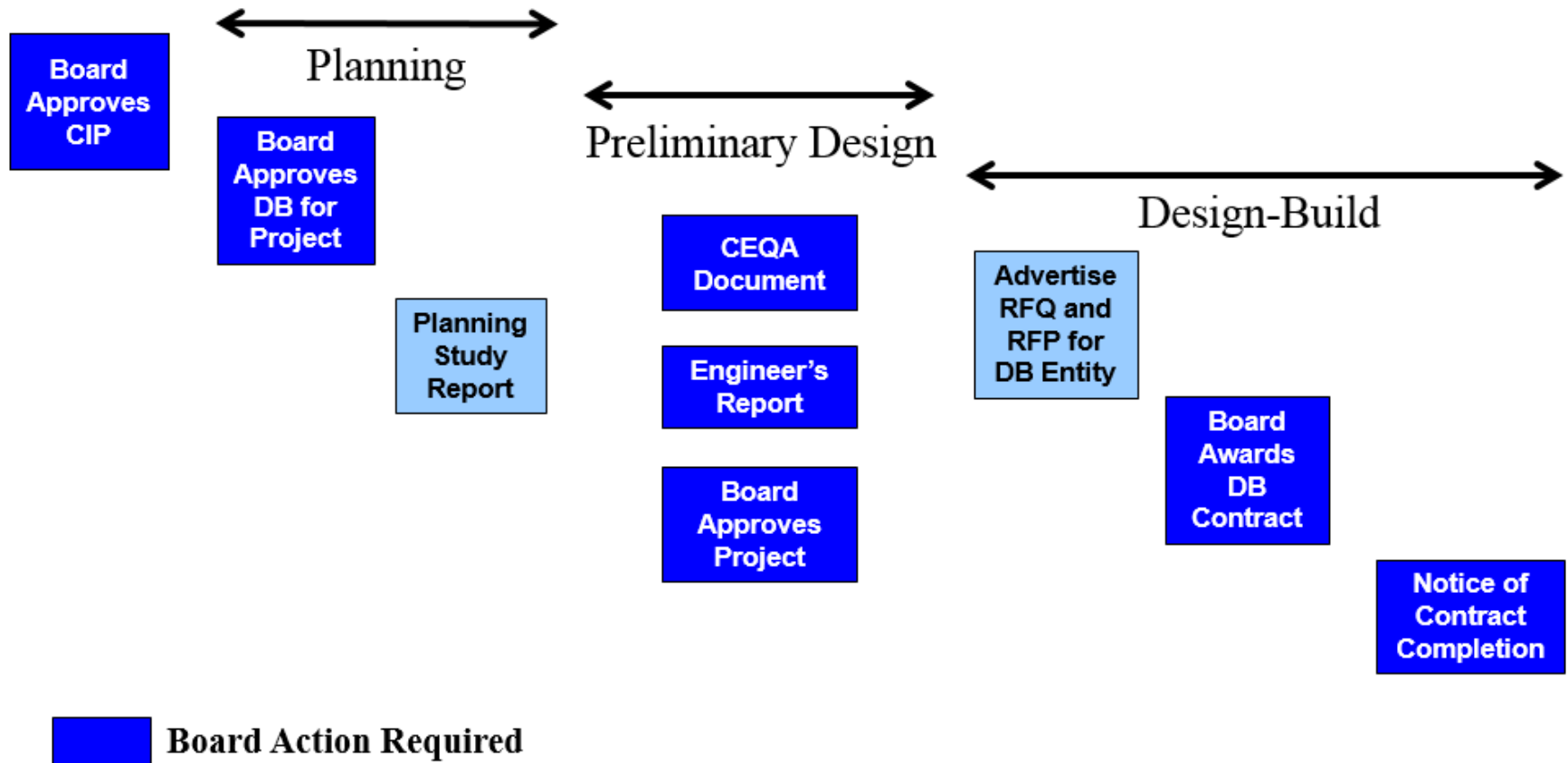
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