

Project Changes

Bond Steering Committee

February 5, 2025

*** As presented to the Committee with minor corrections.*



Information Overview

- Brief Summary of Project Changes
- Board of Trustees Roles/Responsibilities
- Supplemental Information



Project Changes



■ Project Changes (an overview)

- All Projects Have Changes

construction projects are custom work (changes represent “realized risk” and the project delivery method helps to “manage the risk”)

- Changes Can Occur at All Phases of Projects

planning, design, construction, close-out/warranty

- Changes Are Needed When There Are Contractual Changes

and they result in Amendments and/or Change Orders



■ Project Changes (an overview) - continued

- Project Delivery Method Matters
each method addresses changes according to their contractual structure
- Types of Changes
determined by contract language, vary by project delivery method
- Who Bears Costs of Changes
scope/quality, budget, schedule/milestone dates and typically only tracked during construction
- Mitigating and Managing Changes
4 P's ... prevention, precision, participation, and pro-action



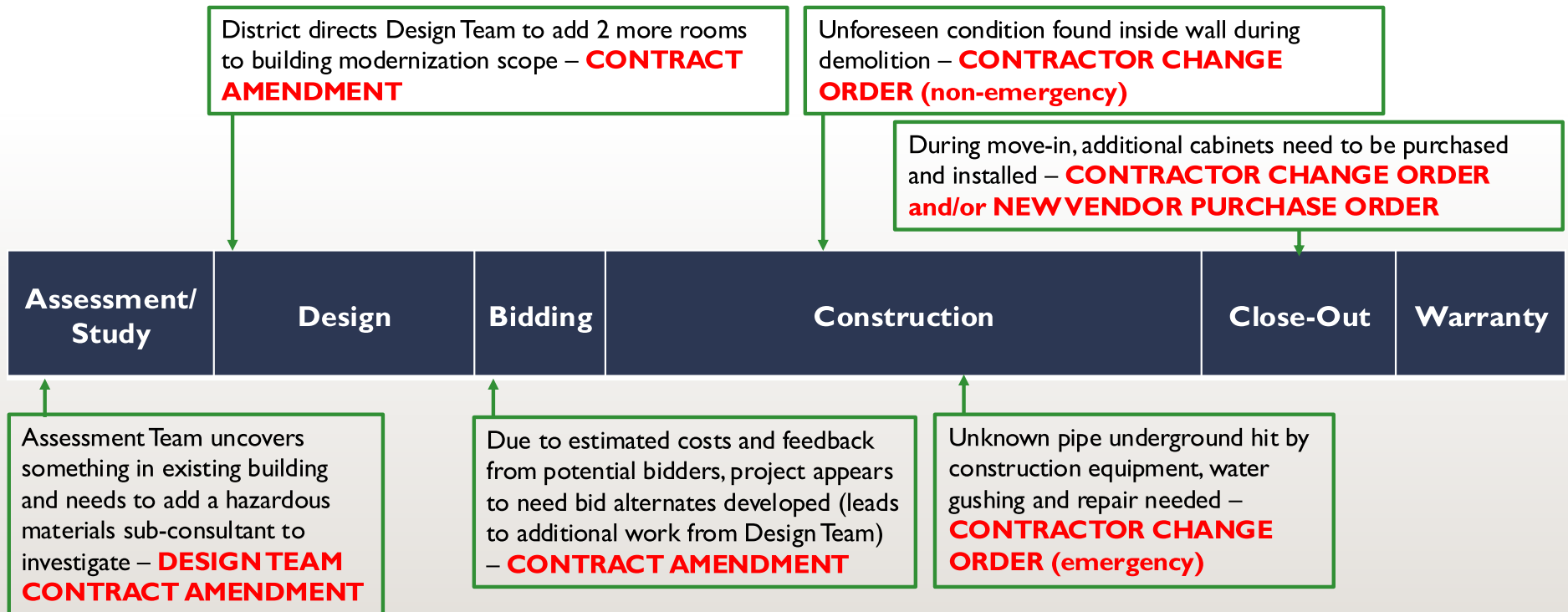
■ Changes Are Not All Equal

- Life Safety
- Legal
- Operational Impacts
- Cost
- Schedule Impacts
- Sequence of Work
- Emergencies are not all created equal

	Urgent	Not Urgent
Important	<p>Gas line exposed (unknown location) and now leaking gas</p> <p>Sudden regulatory change requiring immediate modifications to the project design</p>	<p>Changing color of a non-essential decorative element in the main hallway</p> <p>Switching type of light fixture in storage closet to a different model</p>
Not Important	<p>Responding to a request to temporarily block off a walkway for an event, even if the normal access is not affected</p> <p>Needing to quickly reposition a planter box causing a visual distraction for a high-profile visitor arriving shortly</p>	<p>Changing the pattern of the floor tile in a decorative area that is not a high traffic area</p> <p>Updating the hardware style on cabinets with a similar design</p>

Some examples shown above

Sample Project Changes (Design-Bid-Build Project Delivery Method)

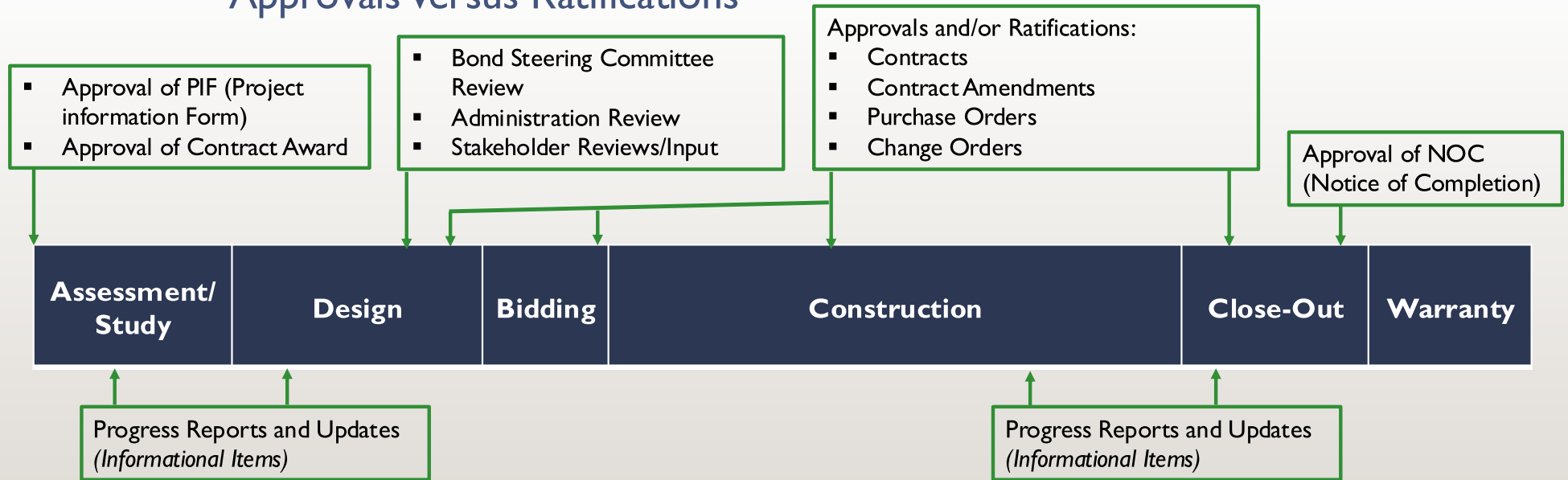


Board of Trustees



■ Board of Trustees Roles, Responsibilities and Actions

- Delegation of Authority
- Professionals Hired to Represent District/Act on Behalf of District
- Approvals Versus Ratifications



■ Board of Trustees Impacts

- Cadence of Board Meetings (speed of projects versus speed of Board meetings)
- Legal Counsel Involvement and Direction
- Impacts of Not Approving Changes



Assessment/ Study	Design	Bidding	Construction	Close-Out	Warranty
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Questions/Discussion

Supplemental Information



Project Changes



- All Projects Have Changes...Why?
 - Construction Projects Are Custom Work
 - Mass-Manufactured Car (*even with numerous options you may select*) versus fully Custom Car
 - Roll-Out of a New Car Make or Model



1979



1989



1999



2009



2019



Honda Accord 4-Door Sedan

- Occur Throughout the Project
 - Planning / Assessment
 - IPP / FPP (*for State-funded projects*)
 - Initial Ideas versus Ideas Following Assessment
 - Design
 - Stakeholder Reviews, Concept Options, Costs
 - Construction



- Drivers/Requirements of Change
 - Public Contract Code
 - Procurement Rules/Regulations
 - Code Enforcement and Interpretation
 - Outside Agencies
 - Board Policies
 - Administrative Policies
 - Owners' Requests
 - Project Delivery Method Impacts
 - Contract Requirements including Allowances and Contingencies



- Needed When Contractual Changes Arise

- Amendments
- Change Orders

- Contract Documents *(differs for consultants and builders, and project delivery methods)*

- Contract/Agreement, Exhibits, Attachments
- Forms, including Bid Form
- Design and Construction Drawings
- Construction Technical Specifications
- General Conditions and Supplementary Conditions



■ Types of Changes

- Scope / Quality
- Schedule
- Budget
- Impacts of Changes (increase, decrease to costs / time or have no impact on one or more of these)



■ Tracking Changes

- Planning/Assessment and Design – not typically tracked, from a monetary perspective
- Construction – typically tracked, 8% - 14% common for monetary impact



- Bearing Costs of Project Changes
 - Based upon Agreement / Contract Language and Terms – who “owns” the contingencies and/or allowances
 - Borne by Responsible Party(ies) – not always one party bears the costs



- Risks, Exposures and Liabilities
 - Costs and Budget
 - Schedule / Project Timeline and Milestones
 - Performance (*failure to produce results consistent with specifications*)
 - Others – public trust, operational, market, legal, external hazards, project deferral



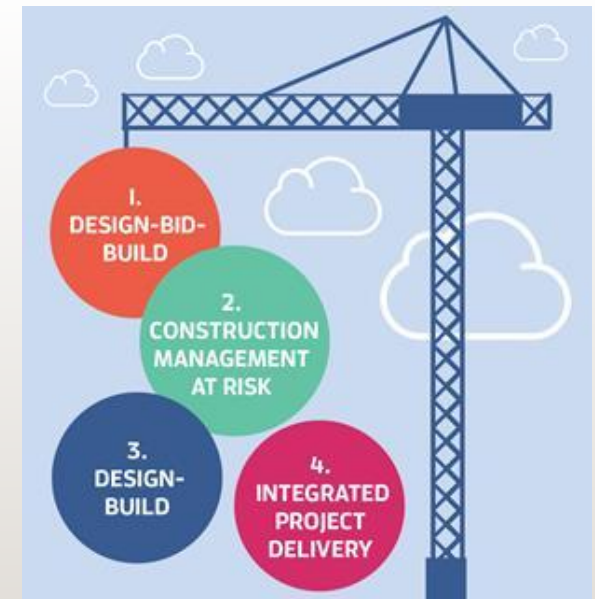
- Common Reasons for Changes During Construction
 - Unforeseen Conditions in Construction
 - District-requested Changes (*usually scope of work*)
 - Contractor-Requested Changes (*usually result in credits*)
 - Code / Inspector Requirements (*Regulatory Agency requirements*)
 - Architect / Engineer Errors or Omissions in Construction Documents
 - Time – changes Agreement terms for completion and / or milestone dates (*may or may not have an associated cost*)
 - Emergency Conditions Not Caused by Contractor
 - Other (*unavailability of specified products or supply chain disruptions, for example*)



Impact of Project Delivery Method



- Project Delivery Method Matters
 - CM (Construction Manager) and CM at Risk
 - **Design-Bid-Build**
 - **Design-Build**
 - IPD (Integrated Project Delivery)
 - Multi-Prime
 - P3 (Public-Private Partnerships)



- Each Method Has and Deals with Project Changes
 - Contingencies (sometimes allowances also) in Project budgets
 - Construction
 - Owner's
 - Soft Costs
 - Where contingencies and allowances held depend upon delivery method and type of contract



- Design-Bid-Build

Performing Arts

Small Capital Projects

Library / Learning Resource Center



- Contractor Bid on Exactly and Only Work Described in Construction Documents
- Contingency Held by District (not in construction contract)
- Changes During Construction Require Board Approval – as they change scope / quality, schedule or budget (all or some of these)

- **Design-Build**

Science Building

Autotechnology Building

Biotechnology and Science Building

- Contractor and Architect on Same Team, Errors and Omissions Not an Issue
- Primarily District-requested Changes
- Contingency Within Design-Build Contract
- District also Holds Small Project Contingency Outside Design-Build contract

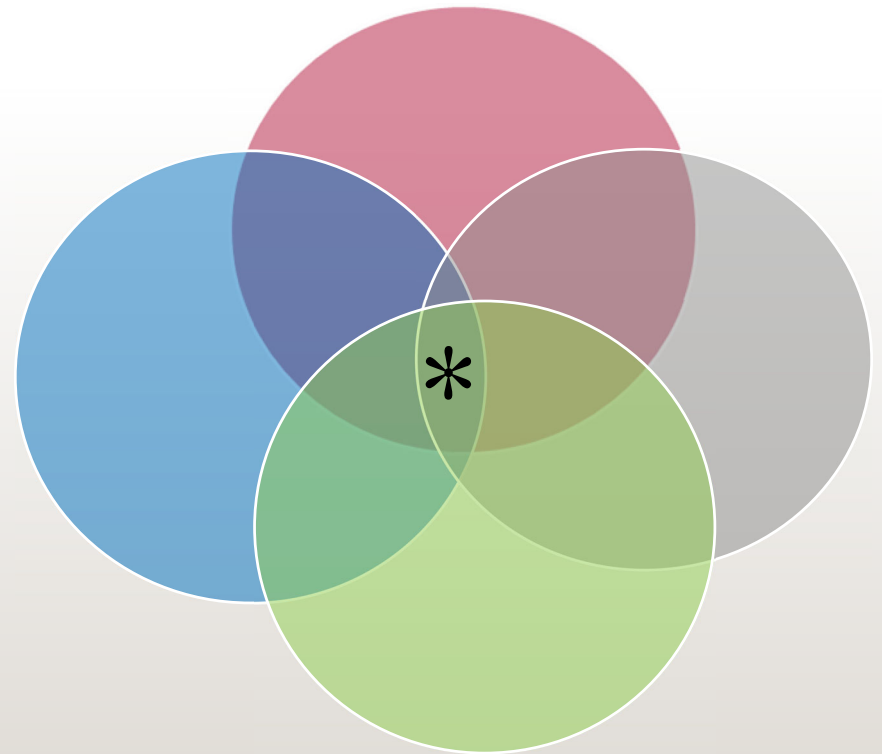


Mitigating and Managing Change



■ Four P's of Change Mitigation and Management

- Prevention
- Precision
- Participation
- Pro-Action

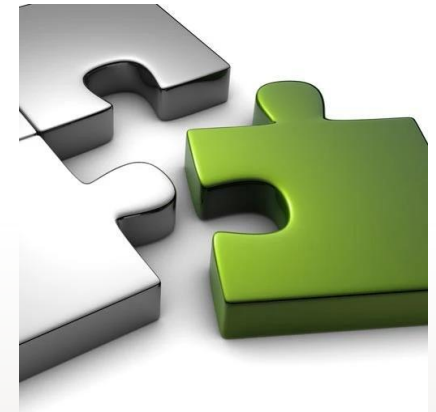


- What Can The District Do – Some Key Steps
 - Studies / Assessments and Design Thoroughness
 - Selection of Project Delivery Method
 - Understanding Balancing Risks with Costs
 - Implementing Lessons Learned (successes to replicate / improvements to make)



■ Strategies

- Due Diligence of Existing Conditions in Pre-Design
 - Accurate assessment of existing conditions; as-built drawings and specifications
 - Confirmation of existing underground utilities
 - Site geotechnical investigation
 - Hazardous materials study and testing
- Complete and Well-coordinated Construction Documents
 - Review of design documents at regular intervals prior to issuing for bid
 - Compliance with budgeted scope of work and Owner requirements
 - Constructability, coordination of disciplines, completeness
- Involve All Stakeholders Throughout Design – different owner perspectives/requirements taken into account



■ Strategies *(continued)*

- Manage / Minimize Scope Creep During Design and District Changes After Bid
- Be Clear with Stakeholders about Scope of Work Budgeted and Approved, and When Comment Period Ends During Design
- Engage Team Members in Prioritizing Scope Objectives to Facilitate Decisions
- Look Ahead During Construction
 - Project Manager and / or Construction Manager consistently look ahead to identify potential issues and pre-empt them, or resolve them with contractor prior to the need for a **costly** fix (and potential Change Order)

