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OCTOBER 19-22

National Owner Panel: Owners Implementing Lean as a Fundamental Approach to their Design and Construction Programs

Terri Gosine, Edmonton Public Schools

James Pease, UCSF Health

Kevin Antonelli, Google

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Owners Implementing Lean as a Fundamental Approach to their Design and Construction Programs



Terri Gosine
Director,
Integrated Infrastructure
Services
Edmonton Public Schools



James Pease
Executive Director,
UCSF Health



Kevin Antonelli
Director of
Construction,
Google



***Moderator:
Henry Nutt, III***
Preconstruction
Executive,
Southland Industries

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Can you apply IFOA to small projects?

Terri Gosine, Edmonton Public Schools

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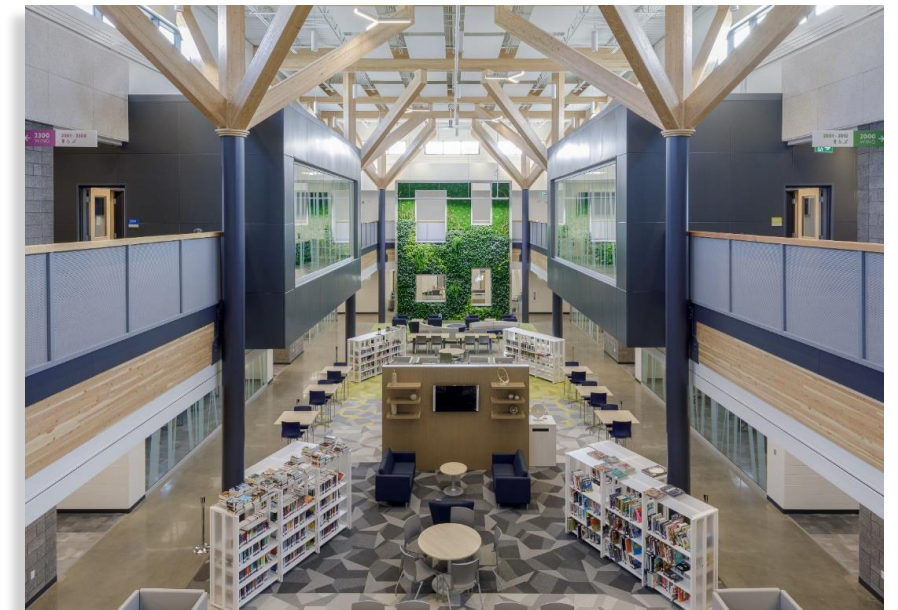
Edmonton Public Schools – our story



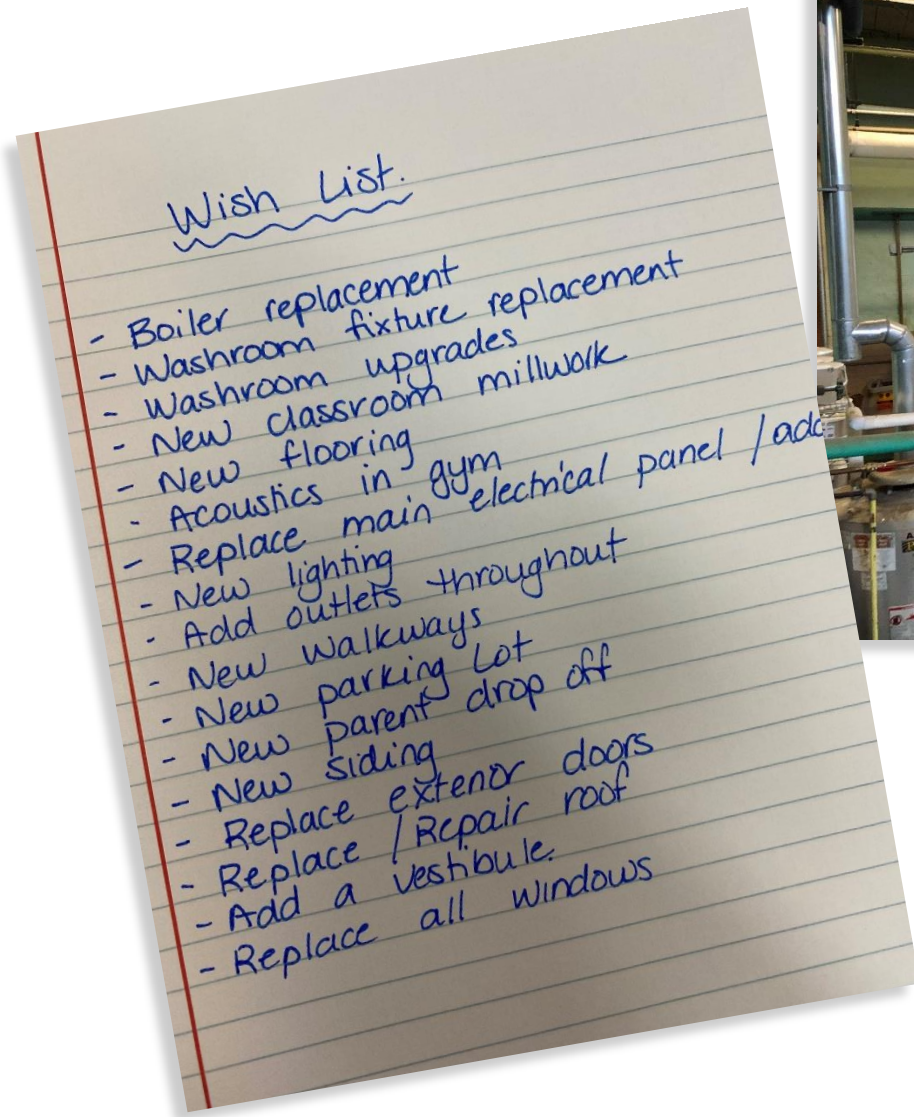
Getty Images,



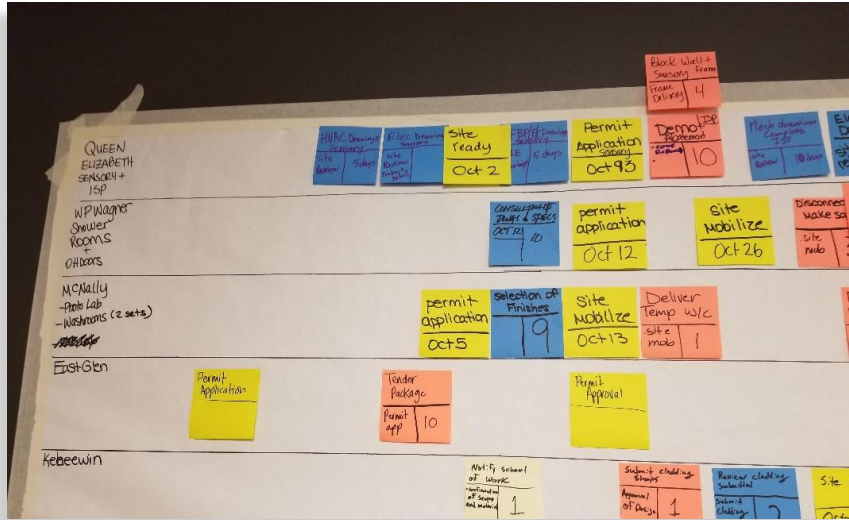
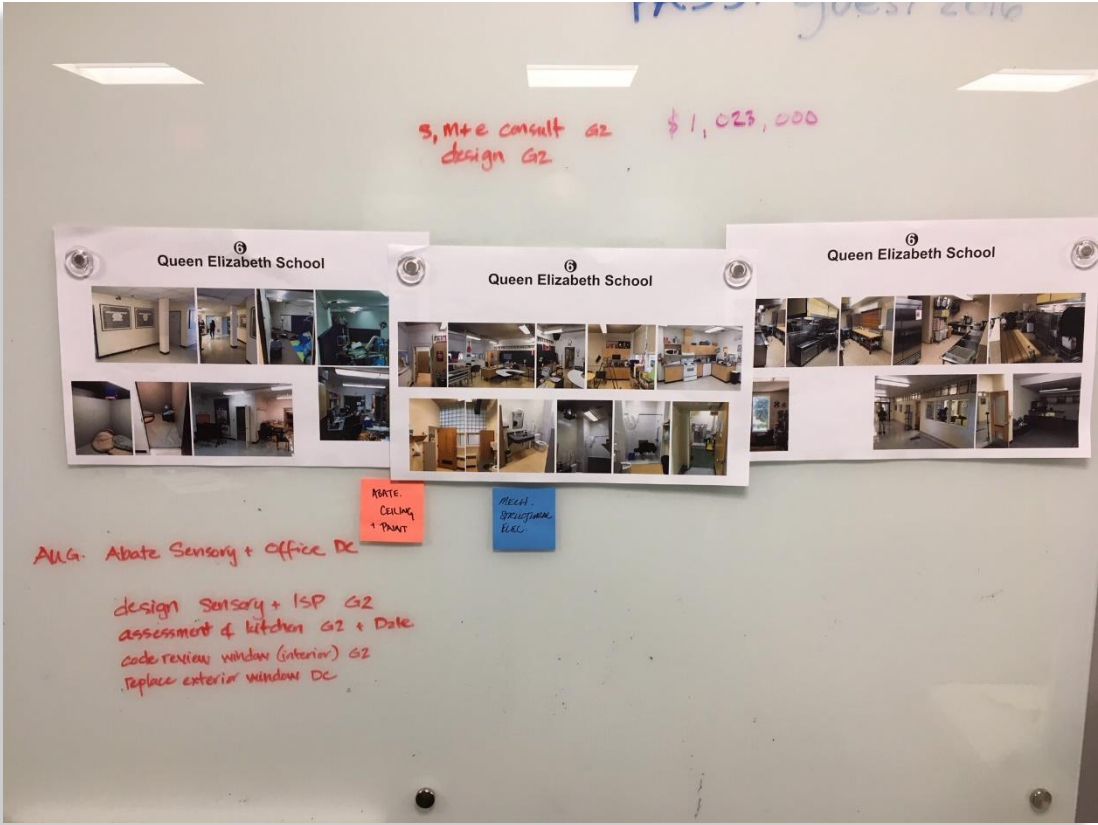
Capital Pilot IPD Projects



Using IFOA for Maintenance Renewal Projects



Lessons Learned



Successes



Next Steps



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An Owner Perspective - UCSF

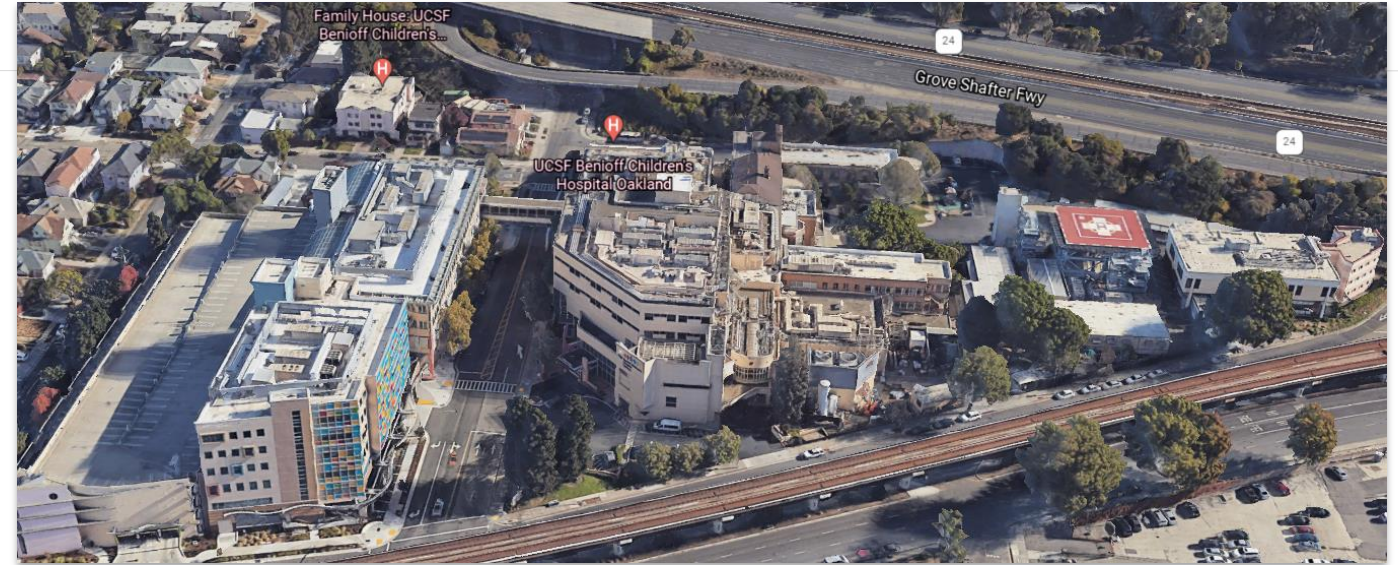
James Pease
Executive Director
UCSF Health

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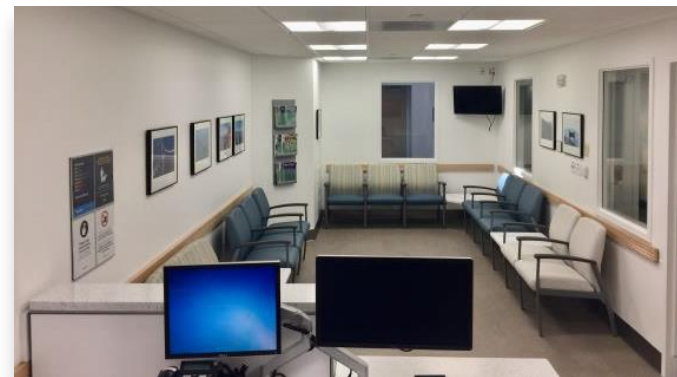
UCSF Overview



UCSF – Some Projects Coming Up

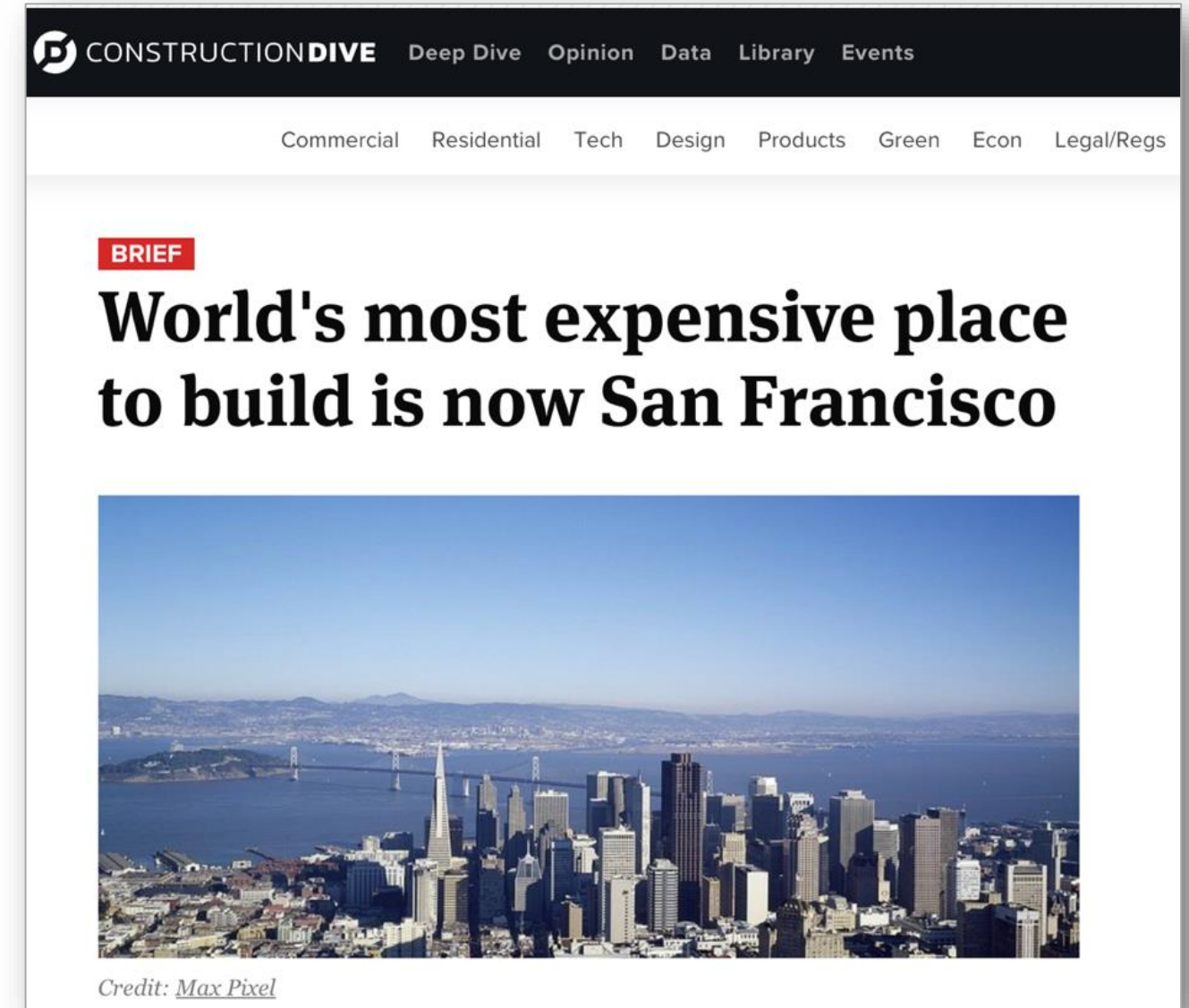


Recent Smaller Projects



Key Challenges

- Construction Cost Escalation
- Skilled Labor Shortages
- Aging Facilities and Infrastructure
- OSHPD and CDPH Coordination
- Hiring & Retention
- We created our own SB1953



What steps are we taking?



Creating a Collaborative Culture



Building a Team of Great People

LISTEN!!!

Training & Professional Development

- Competency
- Capability
- Capacity

Create Opportunities for Growth



Lean Processes



Introducing Lean Concepts Slowly

Not all in one giant leap

- Co-Location
- Target Value Design
- Last Planner[®] System
- BIM for Risk Management
- Design for Fabrication
- Risk and Opportunity Tracking
- Cost to Complete Forecasting
- Takt Time / Location Based Scheduling
- Dashboarding / Visual Management
- Active Learning from Failures



Aligning Business Deal for Success



Aligning the Business Deal

To the extent possible within constraints

Currently:

Using the Public Contracting Code

- Allow for design-assist and/or design-build trades
- Best Value for GC and Major Trades
- Progressive Design/Build Pilot

Going Forward:

- Templates for Best Value Selection and Progressive Design Build for Small Projects
- IFOA for Large Projects



In Summary



- 1) Focus on the People
- 2) Implement Lean Processes
- 3) Align Incentives





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How to deliver quicker

Kevin Antonelli, Google

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How to deliver quicker with less resources?

- We are still growing. How to deliver, On time, within budget and with quality—age old construction challenge.
- Large portfolio- small internal staff, need to deliver. How?

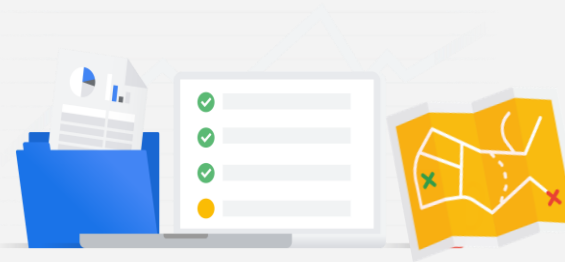
Delivering Success Together...Our Common Measurables

REWS Focus Areas



Buildings that Work

Deliver projects that achieve Design Principles and Outcomes while continually improving user experience



Deliver to our Principles

Create a portfolio that benefits Google, the environment, and surrounding communities



Drive Innovation & Impact

Drive innovations in design, performance and delivery that continually raise the bar to achieve a greater impact



At a Cost Less than Leasing

Execute brilliantly and utilize our Scale to deliver outcomes that are less than leasing and lower operating costs



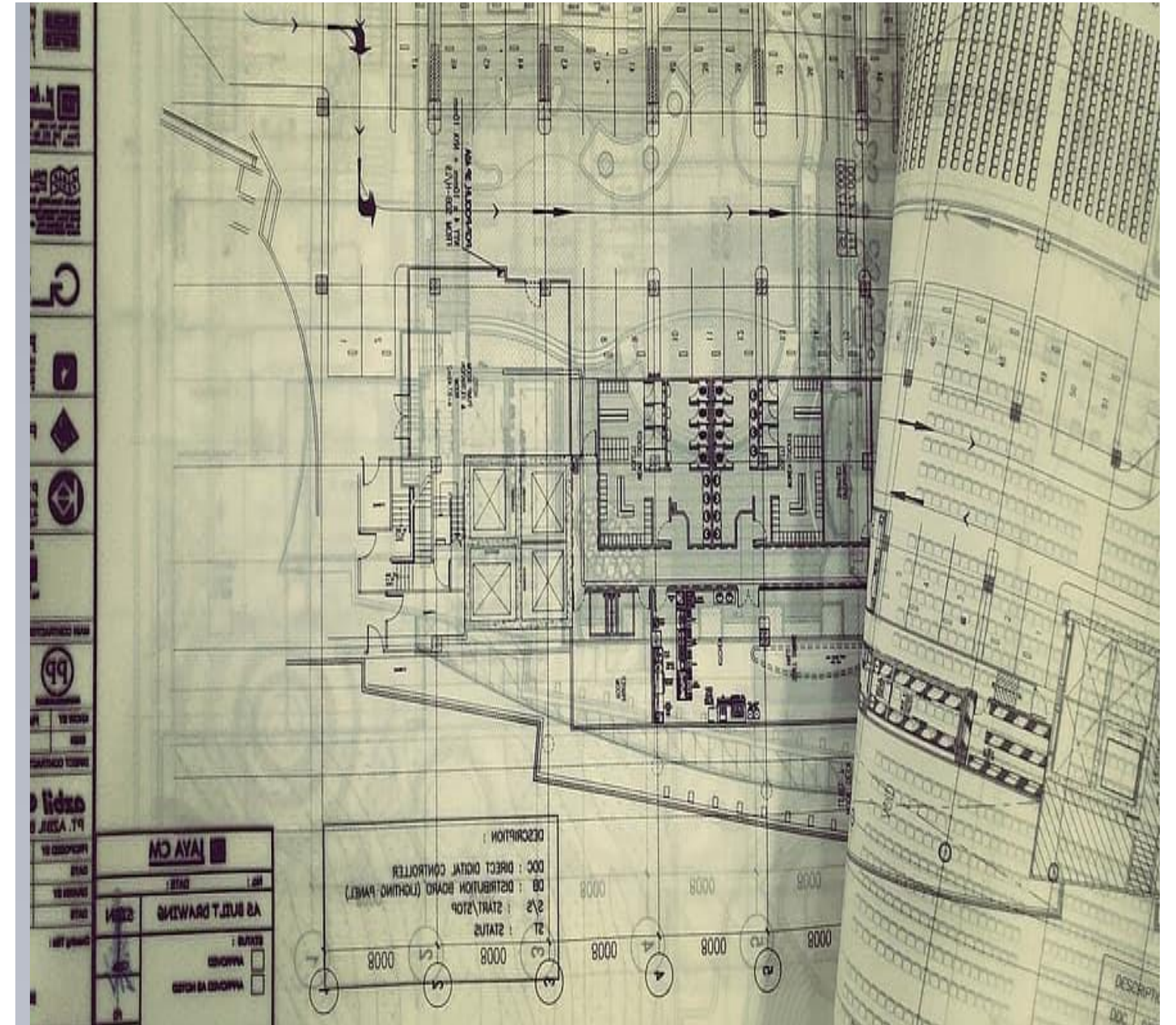
Look at Design Build...why not?

- Success on local large scale public projects- SFO
- Solid MEPFP trades doing DB for years in Bay Area
- Used IFOA on prior project at Google



Let's “Googlize” Design Build !

- ENR- Who are largest GC's performing Design Build?
- Interview...pick stable of GC's...Interview, pick design architects
- Introduce GC's and Design Architects
- T&C's agreed to on Design Build Contract...faster response times
- Form teams...faster response times
- Faster on boarding times, saves money, no continual training
- Cost Savings as teams understand each other from project to project
- What types of Design Build are there? We chose Progressive Design Build
- Training of Google staff- DBIA Certifications
- Develop Design Guidelines, Design Build Playbook, Performance Guidelines, Specifications..follow



General contractor introductions



Damon Ellis
Jake LaMontagne



Daisy Pereira
Gary Filizetti



Craig Blinston
Jit Pahilajani



Russell White
Kirk Benken



Shannon Gustine
Dave Valentine



Doug Collins



Alice Nguyen
Alec Banta



Ryan McGuire
Sarah Jacobson



Lindsay Corotis
Jeff Fucigna

Design architect introductions



Linus Saavedra
Leon Rost

Heatherwick studio

Eliot Postma
Christopher
McAnneny

Snøhetta 

Unable to attend

**STUDIO/
GANG
/ARCHITECTS**

Josh Ellman
William Emmick



Jens Holm

LEVER

Thomas Robinson
Dannon Canterbury

sh p

Todd Sigaty
Angelica Baccon

KIERAN TIMBERLAKE

Matthew Krissel
James Timberlake

WEISS / MANFREDI

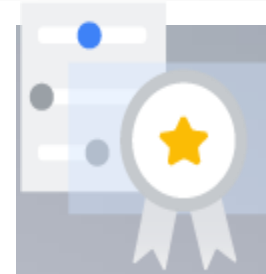
Patrick Armacost
Matthew Ferraro

Procurement scenarios



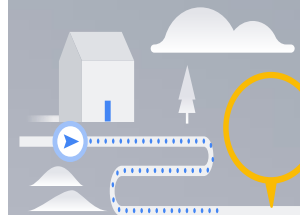
Team Formations (preferred)

Shortlist direct RFP to 2-3 GC's
GC forms team based on review of Google pipeline and A-Teams
GCs are expected to build team and respond to design, performance and delivery requirements.
Selection based on interview, proposed team, and team qualifications.



Limited Competition

Shortlist direct RFP to 2-3 GC's
Pre-concept phase competition
Shortlist based on project size, complexity, typology, and GC capacity.
Stipend given to select teams.



Direct Interview & Selection

Google may choose GC and Design Architect to form Project Team based on specific nuances to the site, city, project team, or building typology

Progressive Design-Build (PDB) facilitates involvement of the design-build team during the earliest stages of the owner's project development, ensuring they are part of the project team developing design solutions. This promotes the greatest amount of collaboration between the three key players in a construction contract – the owner, the designer and the contractor.

While a project design is usually 35 percent complete (or more) by the time a design-builder is procured in the traditional two-step design-build process, PDB adds the design-builder to the owner's team even earlier in the design phase. When the design is somewhere between 50 and 75 percent complete, the design-builder issues a Guaranteed Maximum Price (GMP).

The other major feature of PDB is that the design-builder is selected almost entirely on qualifications. The later price gives some owners heartburn, but if anything there is more cost certainty for the owner

General Contractor Forum

All GC's and Design Teams meet quarterly for project updates

How can you apply this tomorrow?

- Not just GC, DA and AOR....but others?
- Drywall, Mechanical, Electrical, Plumbing, Fire Protection, Others?
- Make commitments to lock in A-teams, have clauses in case projects go on hold
- Manufacturing commitments, buy more and early
- Bulk buying of materials

LEAN tools

- Big Room
- Collaboration (paramount to success)
- Pull Planning (don't think you can do a mega project without using it)
- Reducing waste (on site and off)



IFOA

- Like the partnership of IFOA, not the complexity of the form of contract
- Use of incentives on projects
- Like early involvement by trade partners
- Coordination amount big trades early on and use of tools to ensure conflicts resolved in design not in the field
- We created our of Design Build contract with input from our 9 GC's and made it a market competitive contract, with risk fair risk allocations
- So far successful outcome on over 3MSF of development





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In the spirit of continuous improvement, we would like to remind you to complete this session's survey! We look forward to receiving your feedback.



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Thank you for attending this presentation. Enjoy the rest of the 23rd Annual LCI Congress!