Getting Into the Weeds Of Design Build

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Reflection

There is no Design Build without discipline; no discipline in execution without a fair partnership.

Personal observations from the field

Sharp HealthCare

- Largest Health Care System in San Diego
 - 4 Acute Care & 3 Specialty Hospitals, w/ > 2,000 beds
 - 2 Affiliated Medical Groups, w/ 27 MOBs
 - Integrated Healthcare System, designated one of only 32 Pioneer ACOs in the nation
- Largest Private Employer in San Diego
 - > 18,000 Employees
 - 2,600 Affiliated Physicians
 - 2,000 Volunteers



















Sharp's Design Build Program

- 4 years & 18 Projects
- \$178.4 M in Construction, with a Total Project Cost of \$233.4 M
 - ~ 50% will be completed by 1/13
- All Projects:
 OO Budget
 OO Schedule
- No claims, no litigation

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Overview

- 1. It's all about Balance in the RFP
- 2. The Healthcare Difference
- 3. Details Lost the Weeds
- 4. Flawless Execution & Lessons Learned
- 5. Looking Forward



1. Detail in the RFP

- A good RFP is the 1st step
- Striking the right balance between:
 - Guidance,
 - Code Compliance,
 - Prescriptive Standards,
 - Freedom for Design Innovation
- Not one size fits all



2. The Healthcare Difference

- Feasibility Studies
 - Space Program & Adjacencies
 - Floor Plans to clarify scope & set a MAC
 - User concurrence between staff & physicians
 - Cornerstone of 5 year Capital Planning
- Six-Sigma before architectural plans
- Mock-Ups for clinical functionality
- Design Build Master Planning



Eight Big Differentiators

- 1. Uncertainty over revenue
- 2. Impact of Healthcare reform on bed demand
- 3. Uncertainty over the affordability of the "design amenities"
- 4. In California, the impact of SPC-2 buildings coming out of acute care service in 2030
- 5. Remodel versus new
- 6. Expanding out-patient services
- 7. Continuing advances in medical technology
- 8. Continuing advances in internet services

3. Details Lost in the Weeds

- Deadlines for owner actions
 - Decisions
 - Purchase Orders
 - Delivery dates
- Room data sheets
- Last minute catch up on items like:
 - Seismic bracing of minor equipment
 - Way Finding
 - Elevator Inspections & Variances
 - Make your own list



4. Flawless Execution

- Best Practice begins when ...
 - Work is well organized,
 - Communication is excellent, and
 - We put ourselves in the other person's shoes.



4. Flawless Execution

- We know best practice:
 - Manage change
 - Current paper work ... Bulletins, Change Orders, RFIs, Submittals, POs, etc.
 - On-going Schedule recovery
 - Vendor coordination
 - Real time decision making
 - Smooth Shutdowns
 - Well orchestrated moves between phases
 - Fair decisions
 - Respect, friendship & fun!

5 Best Practice Tips for Owners

- 1. Start with a good RFP
- 2. DB is a partnership
- 3. Be responsible for the Owner's duties:
 - Own the permitting relationship
 - Timely decision-making,
 - JIT process for OF equipment,
 - Managing change & on-site coordination
- 4. Embrace the discipline of documentation:
 - Bulletins for any changes,
 - Timely payments & monthly Zero Cost Claims review
- 5. Use all the tools in the toolbox:
 - BIM & Prefabrication
 - Schedules, Pull Planning, Schedule Recovery

Good Lessons to Repeat

- 1. RFP awards for design improvements
- RFP set clear schedule for Owner's moves 8 empty chairs for construction
- MACs based on sound understanding of Scope
- 4. Team work trumps problems
- 5. Schedule recovery as you go

Lessons To Learn From

- RFP fails to clarify:
 - Who completes the equipment list
 - What rooms need wall elevations
 - Construction schedule impacts required by room, by day
 - Functional testing requirement for exterior mock-up
- When is it not a realistic unforeseen?
 - Changes in amps of multifunction printers & exam tables
 - Shut down by fog
 - Hazardous materials site clean up

5. Looking Forward



Construction Timeline

- Earth 4.6 Billion years
- Genus Homo appearance 2.5 Million years
- Modern humans 200,000 years
- Megalaithic structures 900 BC
- Compression structures, domes … Roman aqauducts ~ 19 BC (Pont du Gard) & domes ~ 126 AD (Pantheon)
- Tension structures ... commercial grade steel ~ 1925, pre-stressed concrete ~ 1940's
- BIM ~ 2000

Construction Timeline & Technology



What next?

1.



Lt. GENERAL Russel L. HONORÉ (U.S. Army, Refired) – With Jennifer Robison –

The New Normal

Our New Normal has:

- Information at the speed of light,
- Interconnected global market,
- Huge gaps in education & affluence, &
- Demands for faster, smarter & more cost effective design & construction.

Design Build = Breakthrough

- Not enough to learn from the past
- Current breakthroughs = the Norm
- Design Build = problem solving
- What does my client need?



DBIA = Breakthroughs

- Yesterday's hurdles are today's norm's
 - On Time & in Budget = New Norm
 - Design Build procurement, LEED & BIM = New Norm
- Innovation does not mean less quality
- We are in business to solve problems
- What can be done more cost efficiently?

From the execution detail in the Weeds ... to leading tomorrow's Breakthroughs! Here we go!