

# PLAN AND CONTROL

plan to improve productivity

planit  
PLAN & CONTROL CONSTRUCTION

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CEO Planit Inc



# PLAN AND CONTROL

## plan to improve productivity

### Agenda

- About Planit
- Motivation (Why P&C)
- Goal
- Process (How P&C)
- Results



# About Planit

## Our projects





# About Planit

## Our clients



### ● Suffolk

- 1 Boston  
65 Allerton Street  
Boston, MA 02119
- 2 New York  
One Pennsylvania Plaza, Suite 5500  
New York, NY 10119
- 3 Miami  
One Biscayne Tower, Suite #2700,  
2 South Biscayne Boulevard  
Miami, FL 33131
- 4 Tampa  
615 Channelside Drive, Suite 102  
Tampa, FL 33602
- 5 San Diego  
1615 Murray Canyon Road Suite 1000  
San Diego, CA 92108
- 6 Los Angeles  
550 South Hope Street, Suite 700  
Los Angeles, CA 90071
- 7 San Francisco  
525 Market Street, Suite 2850  
San Francisco, CA 94105
- 8 Dallas  
901 Main Street, Suite 5100  
Dallas, TX 75202

### ○ Greystar Development and Construction LP

450 Sansome Street,  
Suite 500  
San Francisco, CA 94111

### ● Webcor Builders

- 1 San Francisco  
207 King St.  
San Francisco, CA 94107
  - 2 Alameda  
1751 Harbor Bay Pkwy.  
Alameda, CA 94502
  - 3 Los Angeles  
550 South Hope St.  
Los Angeles, CA 90071
- ### ○ Skanska
- 1 Los Angeles  
444 S. Flower Street, 22nd Floor  
Los Angeles, California 90071
  - 2 San Francisco  
1 California St., Suite 1400  
San Francisco, California 94111
  - 3 New York  
350 Fifth Avenue, 32nd Floor  
New York, New York 10118

### ● Truebeck Construction

333 Bryant Street  
San Francisco, CA 94107

### ● Swinerton Inc

260 Townsend St.  
San Francisco, CA 94107

### ● Anvil Builders

1475 Donner Ave.  
San Francisco, CA 94124

### ● Liberty Construction Services

350 Granite Street  
Suite 2306 Building 2  
Braintree, MA 02184

### ○ Buena Vista Construction

3291 Wedway,  
Lake Buena Vista,  
Florida 32830

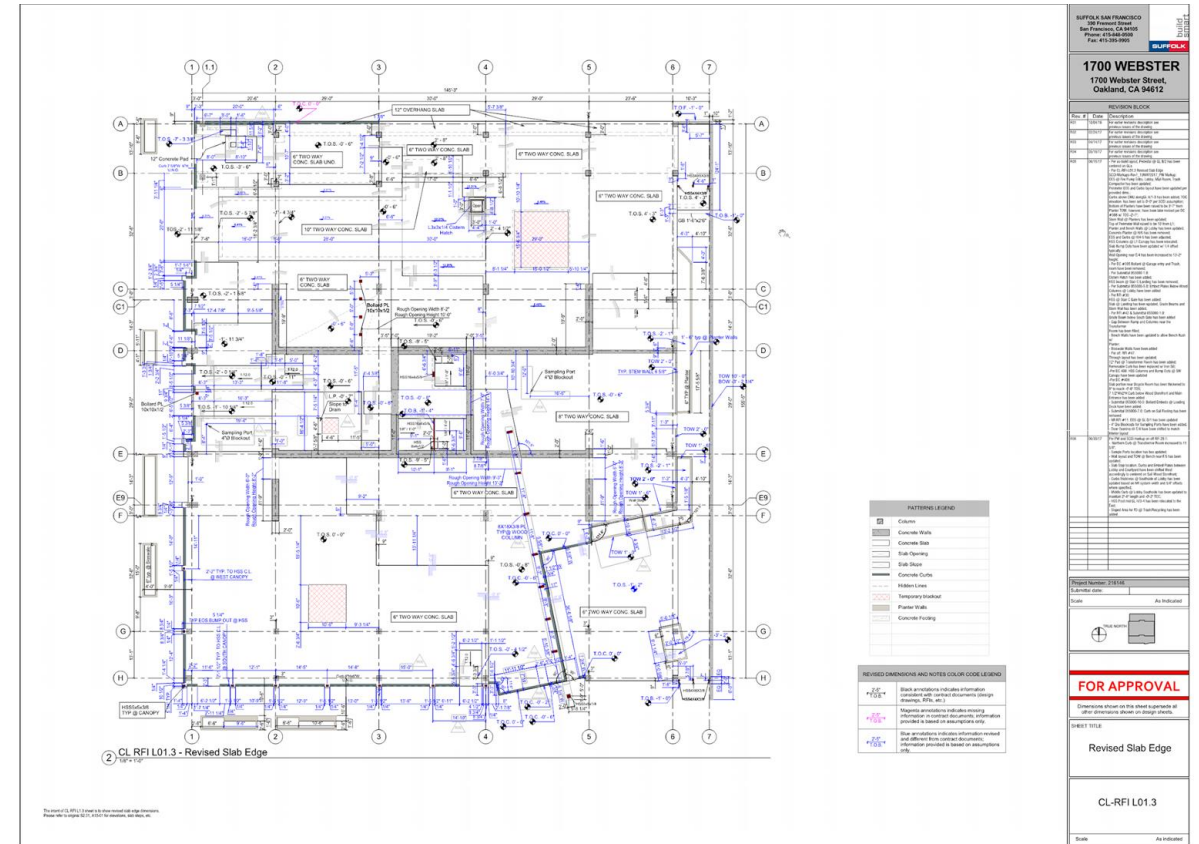
### ○ Suntech Plumbing Corp



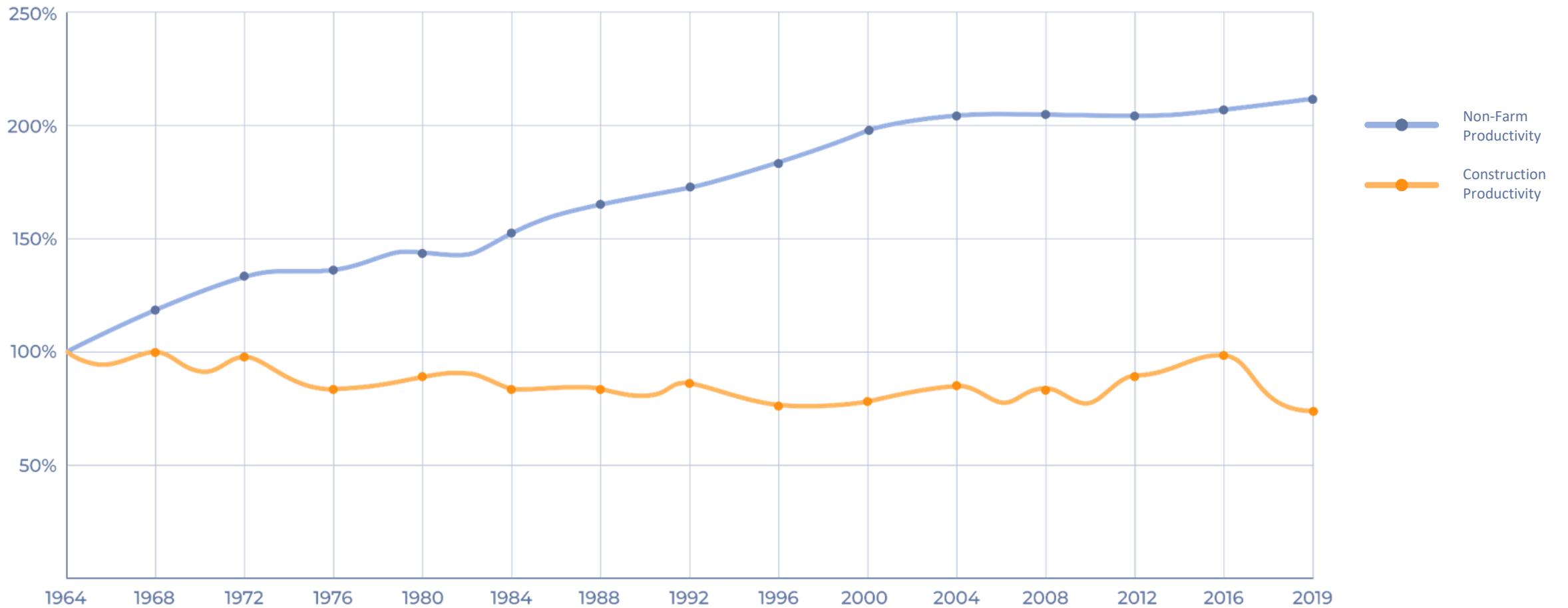
# Why target the Drawings?

“Core of all evil (and opportunity ;-)  
lies in the contract  
drawings”

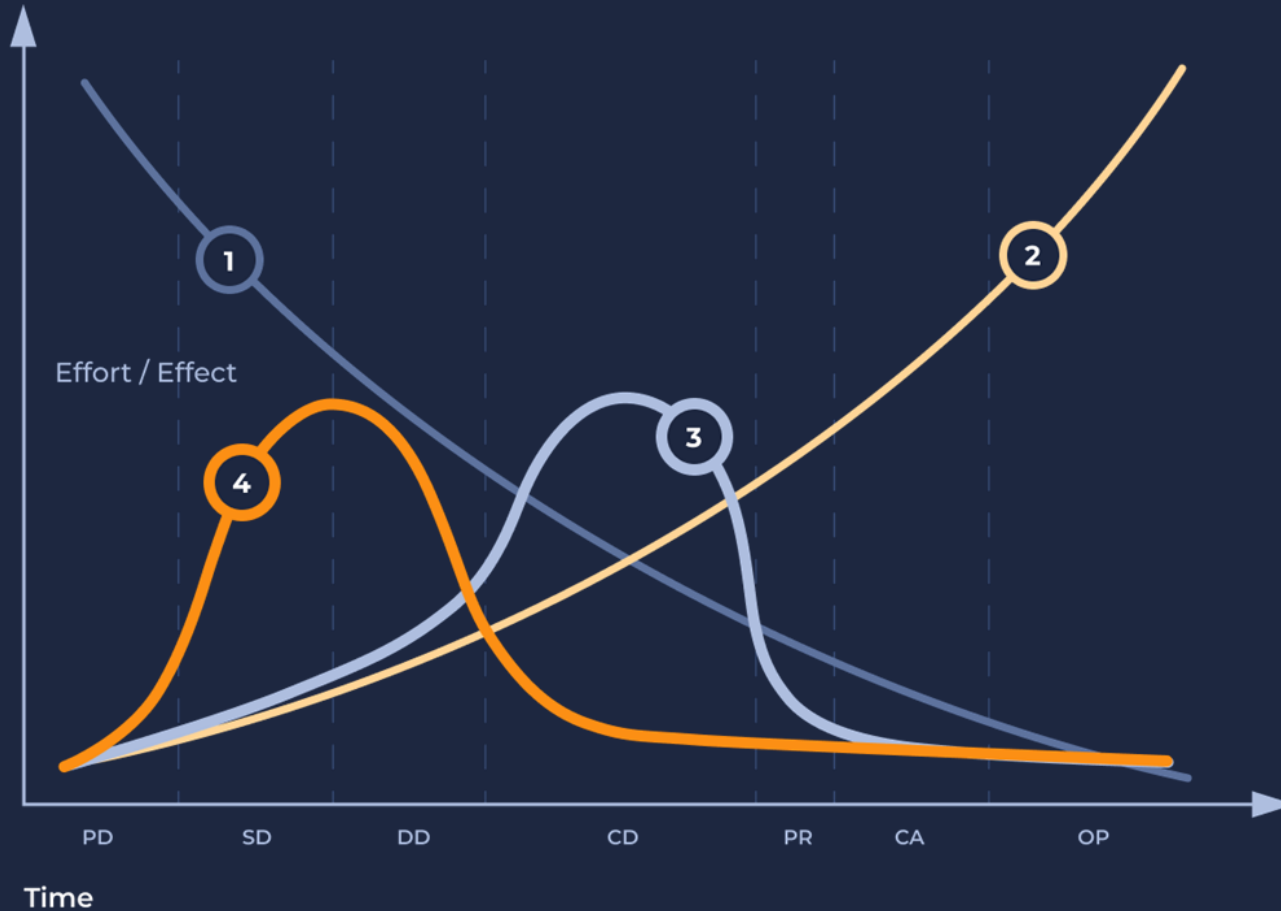
GM Suffolk Construction , Jeff Gouveia , July 2017



# How the industry performed over 4 decades



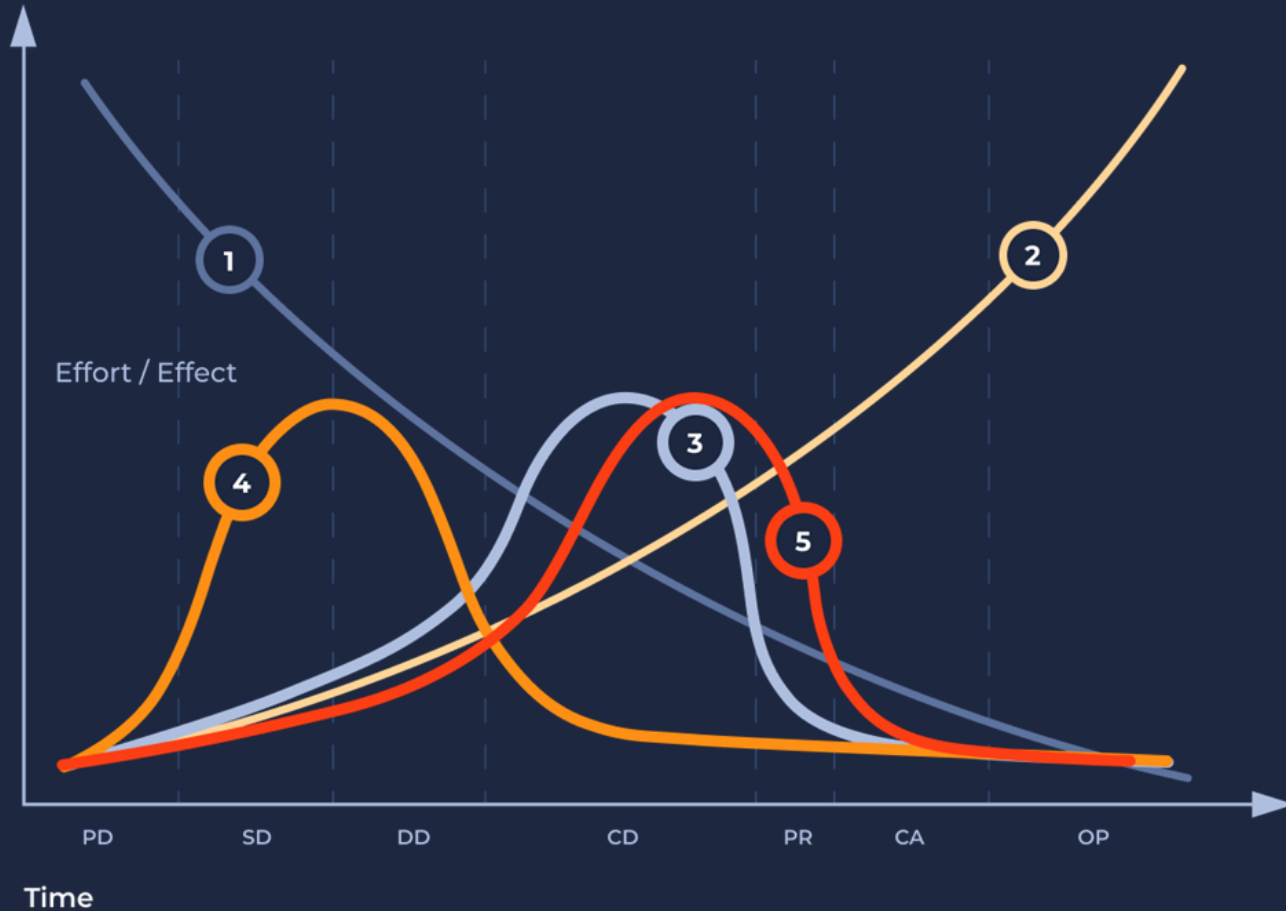
# WHY: How we change - PLAN & CONTROL



PD: Pre-design  
SD: Schematic design  
DD: Design development  
CD: Construction documentation  
PR: Procurement  
CA: Construction Administration  
OP: Operation

- 1 Ability to impact cost and function
- 2 Cost of design changes
- 3 Traditional design process
- 4 Preferred design process

# WHY: How we change - PLAN & CONTROL

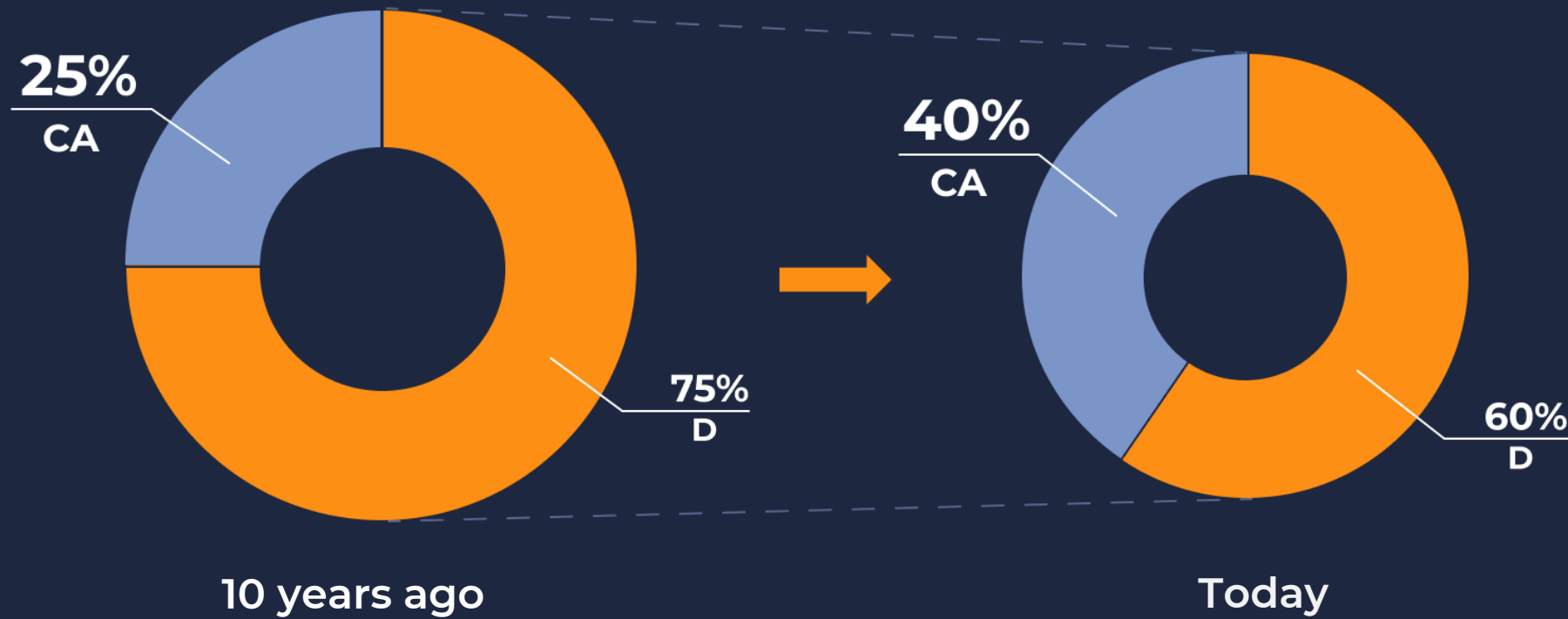


PD: Pre-design  
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- 1 Ability to impact cost and functional cap
- 2 Cost of design changes
- 3 Traditional design process
- 4 Preferred design process
- 5 Real design process

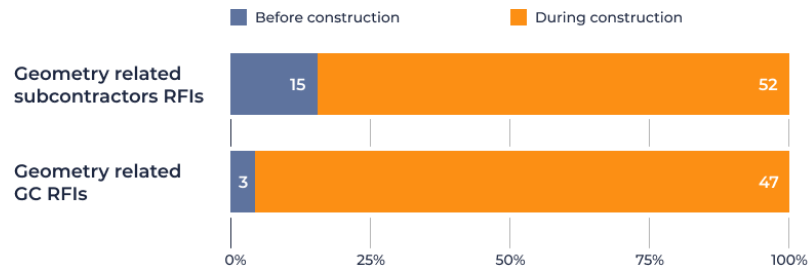


# Architectural effort shift

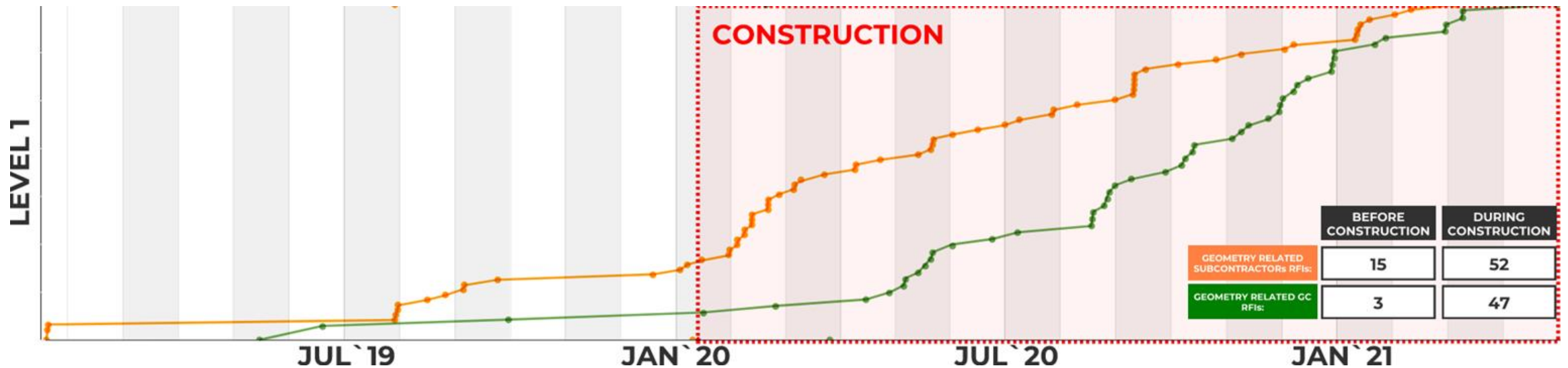
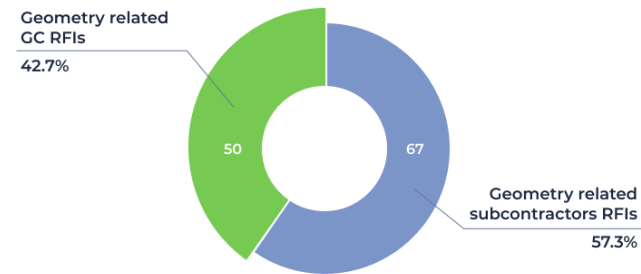


# KPI Matrix (Traditional process MPAK)

Questions before/during construction



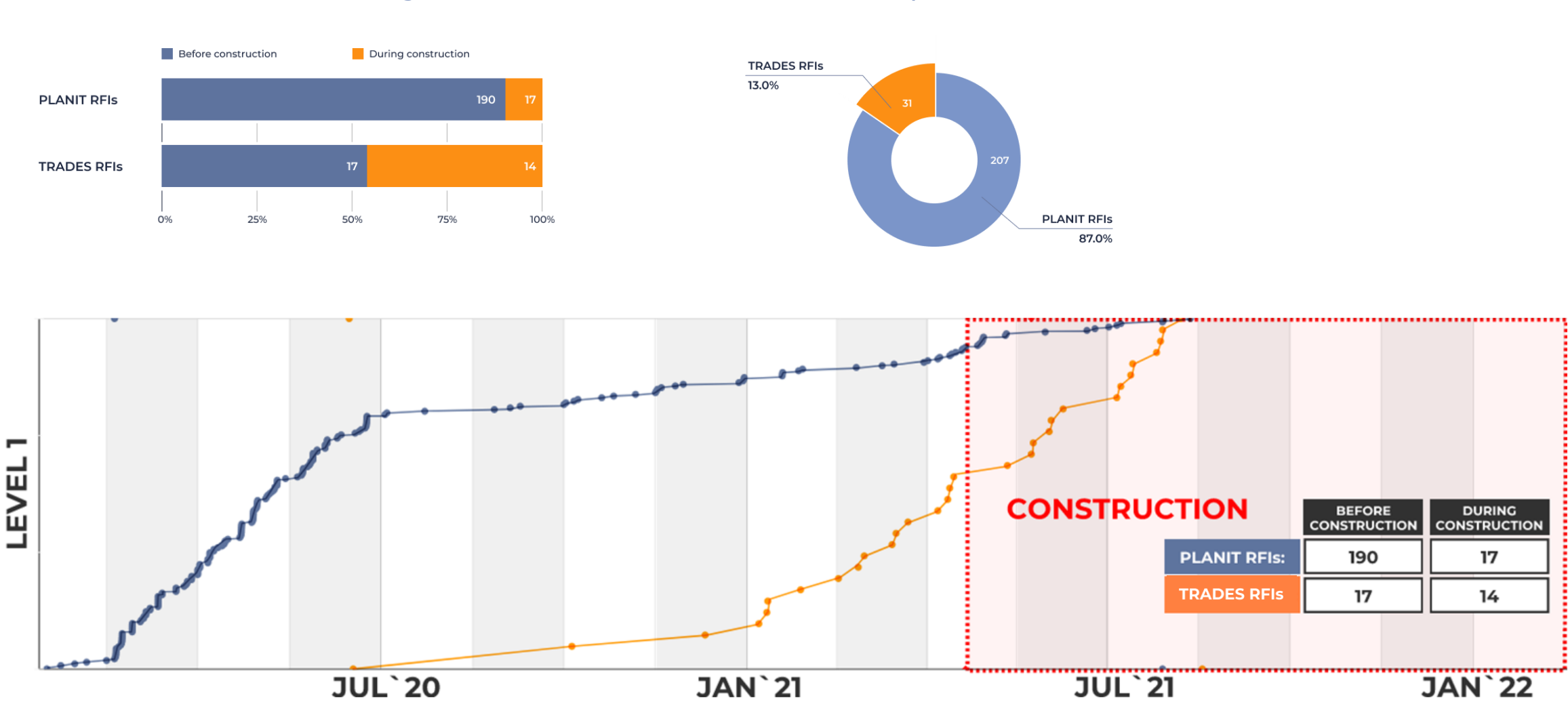
Total questions



# KPI Matrix (P&C PROCESS)

Questions before/during construction

Total questions

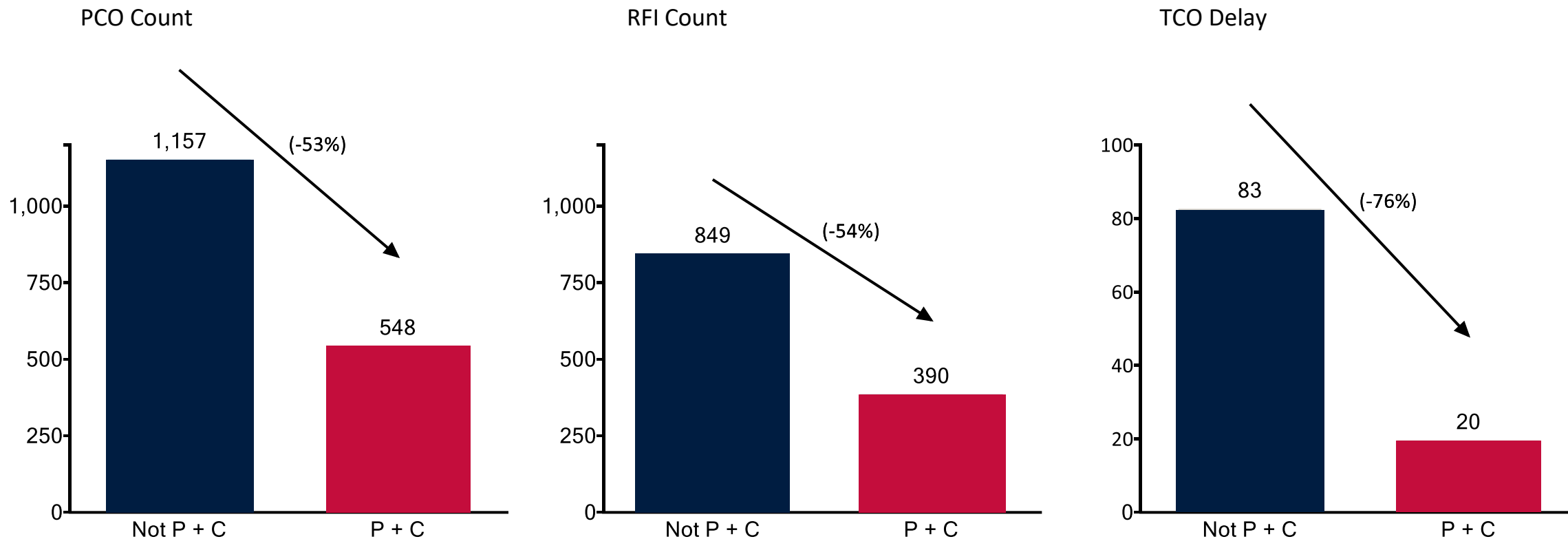


# Design geometry planning example

Planit CL Drawings



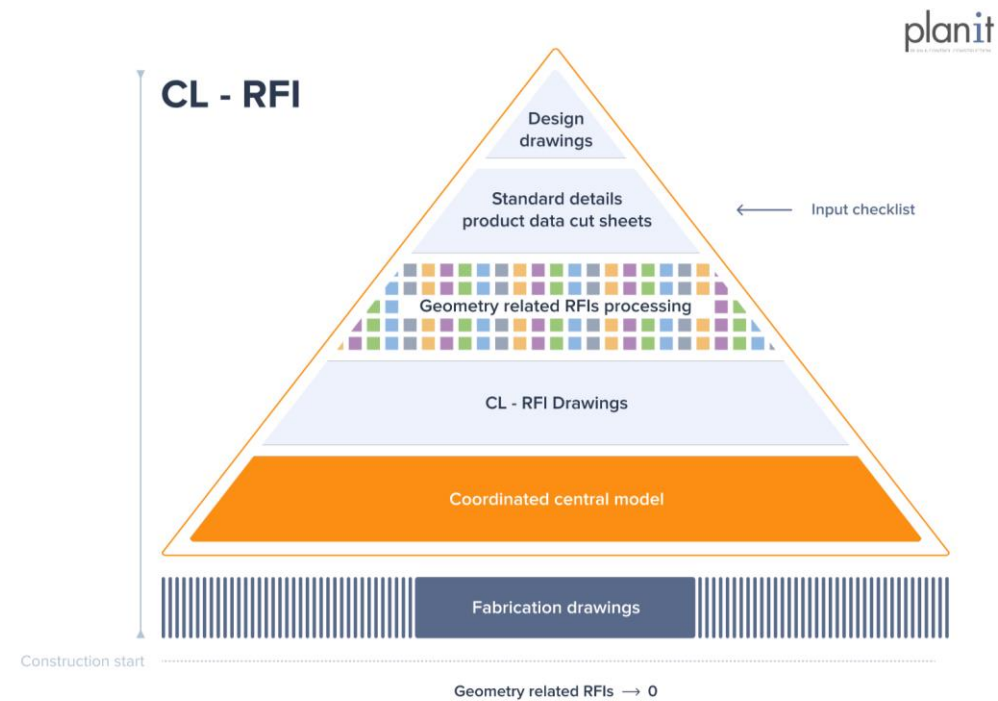
*IMPACT OF PLAN+CONTROL PROCESS ON A \$100M COMMERCIAL PROJECT (n = 53)*



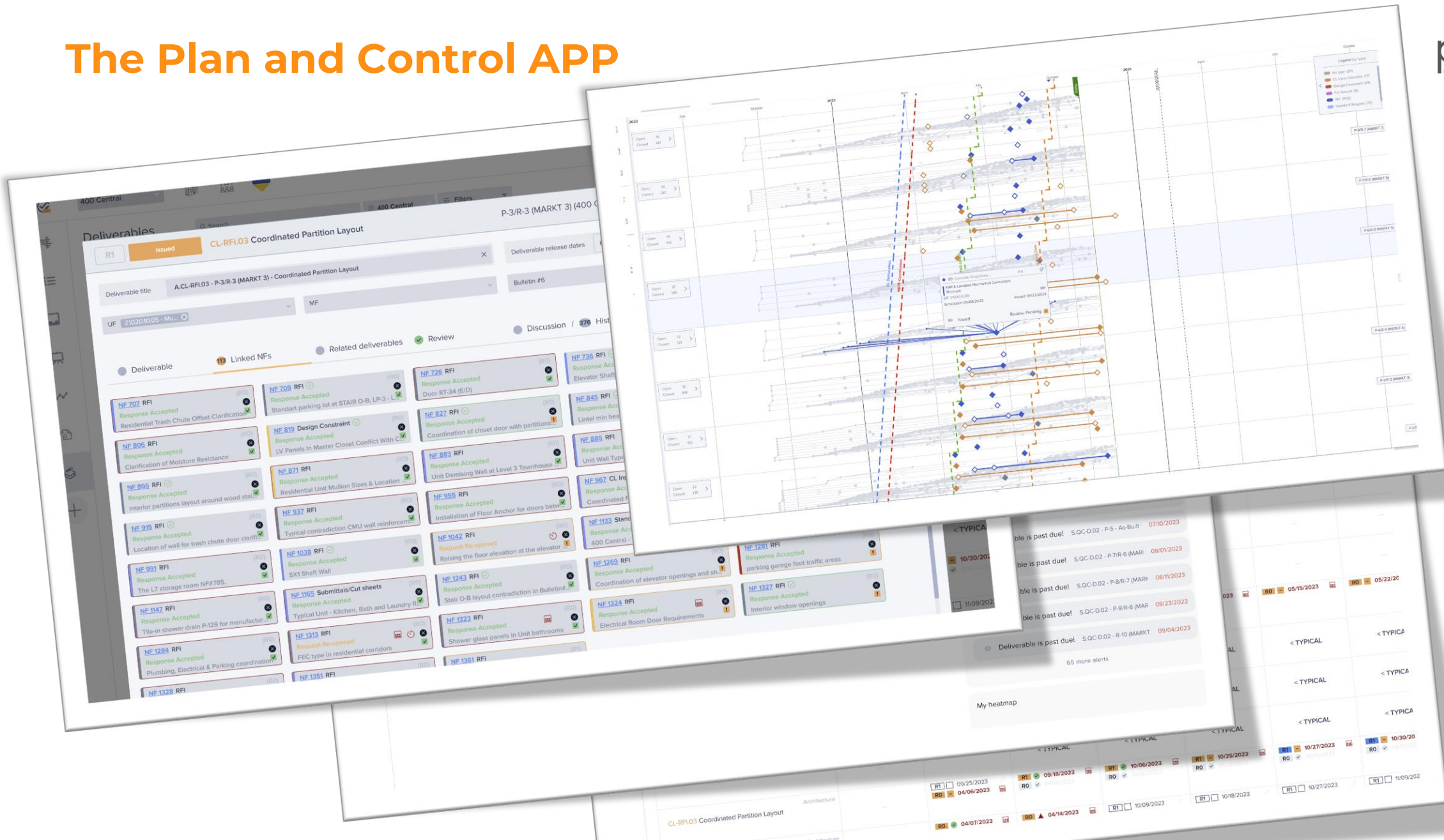
Source: April 2021 analysis of 53 commercial projects



# Process change to enable

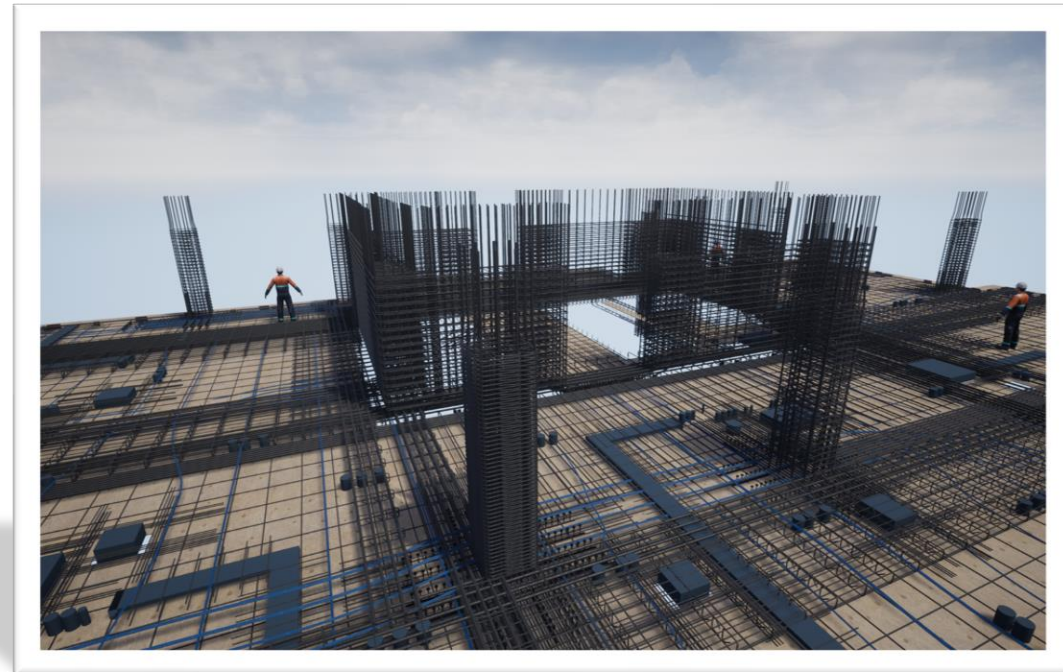
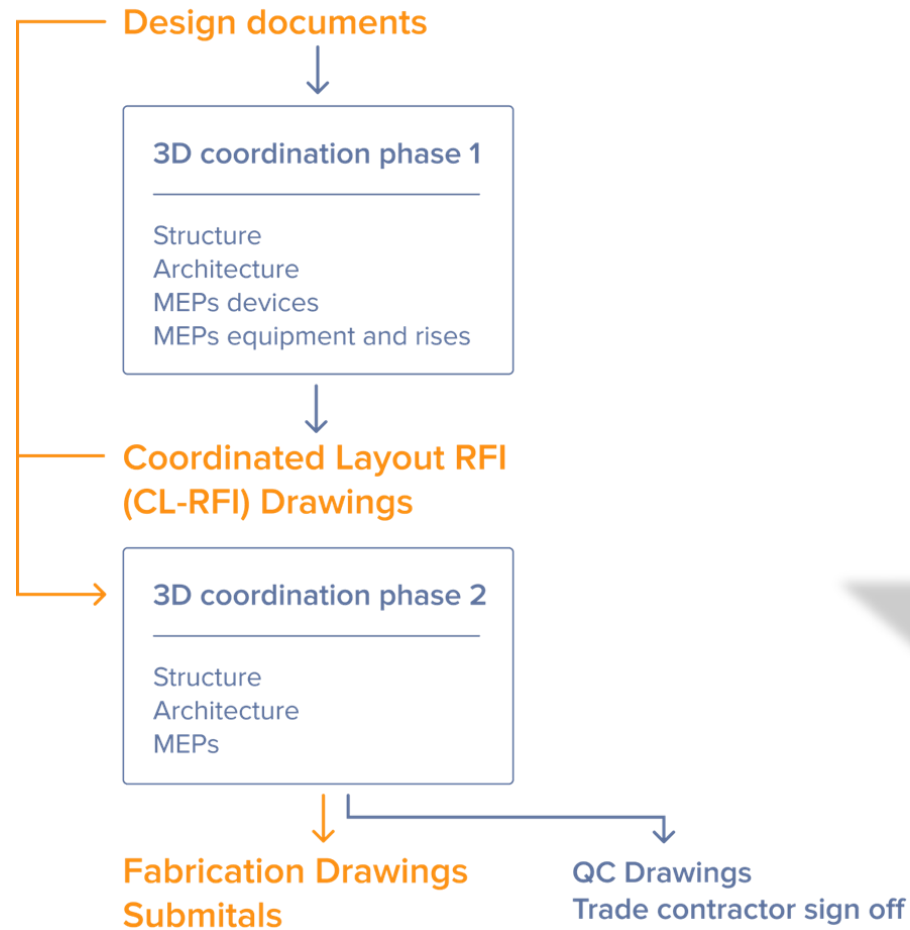


## The Plan and Control APP



# Workflow

## Document Flow in the Model-Based QC Process



Legend: **Contract Documents / Submittals**  
**QC Support Documents**



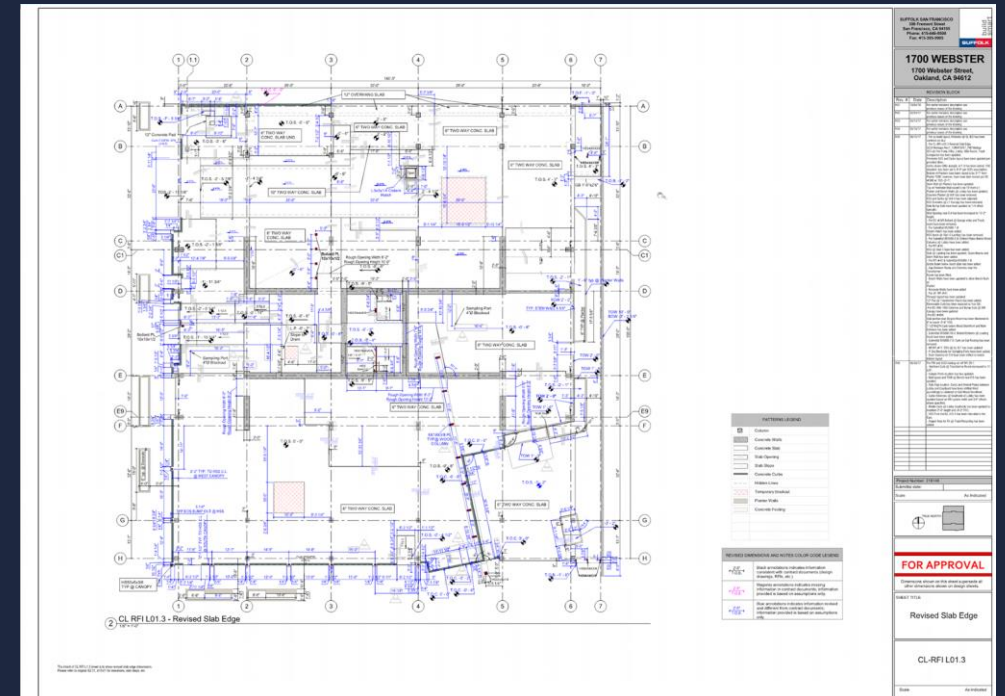
# Design versus CL Drawings?

## Conventional Process

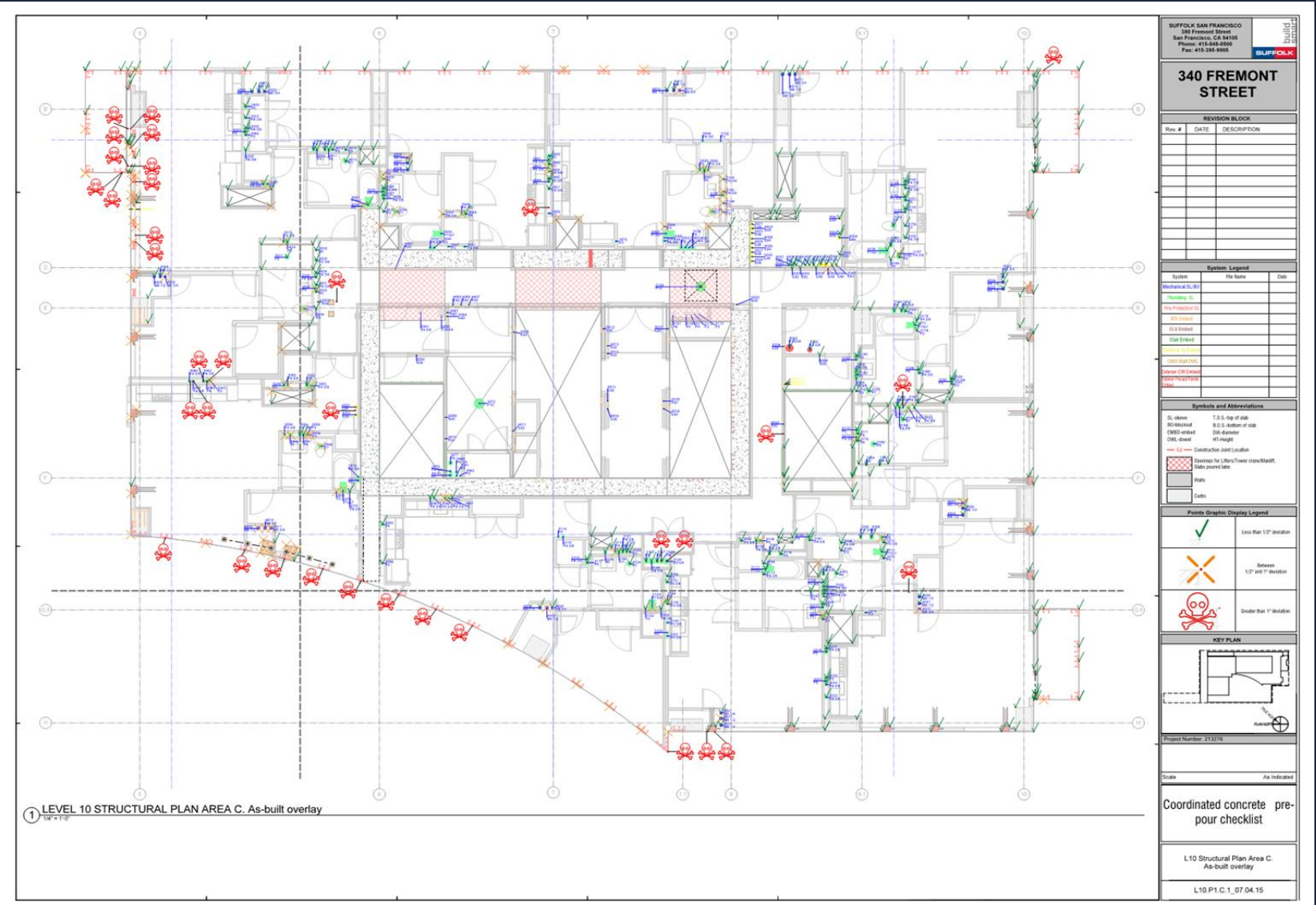
- Design Docs 80% complete
- Dozens of subs produce thousands of shop drawings filling in gaps
- Overwhelmed A&E and GC check thousands of drawings for constancy and issue RFIs
- Hope for the best and issue more RFIs
- Job gets build from dozens of inconsistent drawing sets
- No QC documents to control outcome

## CL process

- Design Docs are corrected with A&E and Sub input
- 1 (one) Approved buildable drawing set is created with the help of dozens of professionals.
- 1 (one) signed off QC set to build project



## The Control Phase





# Design geometry control Example

## The Control Phase



# Design geometry control Example

## The Control Phase

