



IOWA STATE UNIVERSITY

## JACK TRICE SOUTH END ZONE EXPANSION

Ben Bunge, Project Manager, The Weitz Company, Dean McCormick, Director for Design & Construction Services, Iowa State University, & Channing Swanson, Principal Architect, Neumann Monson Architects  
October \_ 2016



**18TH LCI CONGRESS**  
OCTOBER 3-7, 2016 • CHICAGO, IL

# Background

- Bowling in the south end of the stadium had been pursued by multiple athletic administrations over 20 years
- The project was started and abandoned at least three times due to lack of funding
- Phase 1 and 2 Stadium Renovations were completed in 2008 and 2011
- Lead gift of \$25 million received in November 2013 made the South End Zone Expansion project a reality
- But ..... the project had to be completed for the 2015 football season



# Project Goals

- Project Goals:
  - Modernize and bring the stadium up to Big 12 competitors' level
  - Improve amenities for stadium patrons
  - Improve fan experience outside the stadium
  - Increase seating capacity and add premium seating
  - Improve stadium aesthetics and provide a new “front door” to Iowa State University



# Contractual Challenges

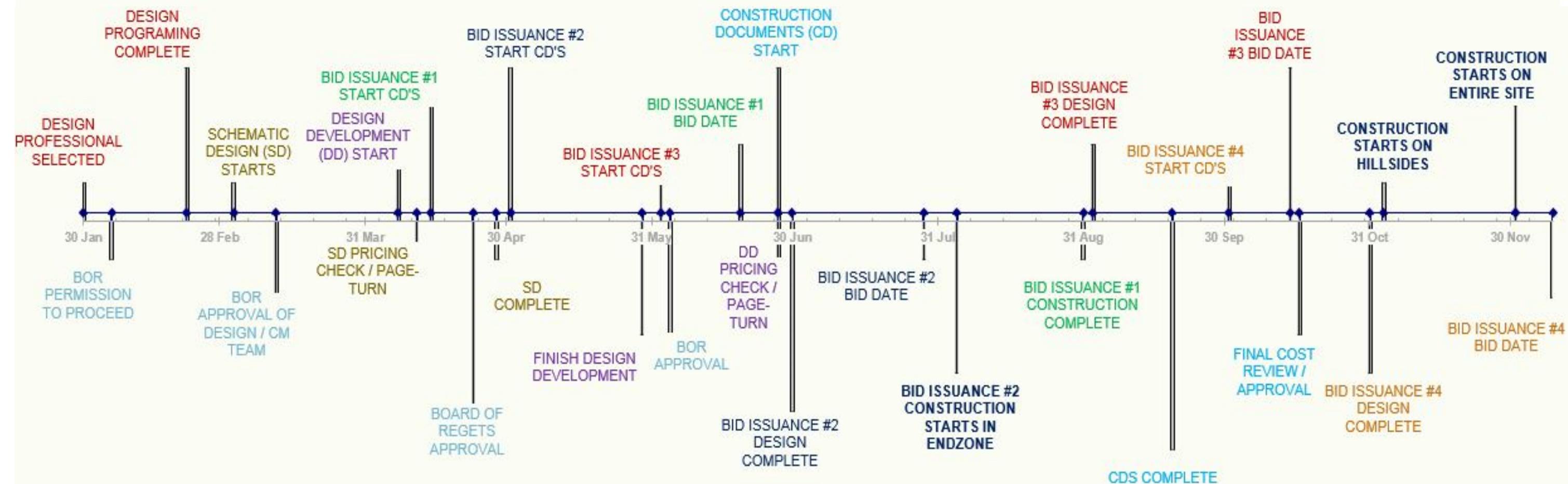
- 21 month schedule from idea to completion - project had to be fast tracked to meet aggressive schedule
- Project was a public project and all work was to be competitively bid.
- Requirement to maintain all seating for 2014 FB season constrained schedule
- The Weitz Company was engaged as a CM-Agent and empowered to be a builder.
- Work was packaged based on the design schedule into four bid issuances



# Design Schedule

## YOUR PROJECT TIMELINE

### 2014 Milestone Schedule, Worked from 12/1/14 Field Start to BOR P2P



# Preconstruction Through Construction

- Fast Track in a Hard Build world
- Initial contracts had to be bid and construction started before design was complete - risk to University
- Tickets had been sold for 2014 season – all seats had to be available
- Project “Cheerleading”
- 4D time-lapsed video at pre-bid meetings
- “Go/No Go” 3 months into construction



# Driving Schedule Efficiencies

- Seventeen (17) prime hard bid contractors
- \$10,000 per day liquidated damages (LD's) with \$100,000 assessed for every game
- Importance of Initial Milestone schedule with logic
- Start the “relay race”



- Existing Site Challenges
- Owner Challenges
- Design Challenges
- Construction Challenges

# Owner & Design Team Buy-In

- Lean concepts kickoff meeting- established project success objectives
- Examined “what if & failure” scenarios and established project priorities.
- Assured that the construction schedule was aligned with project priorities



## IOWA STATE UNIVERSITY

### JACK TRICE STADIUM SOUTH END ZONE EXPANSION



#### PROJECT SUCCESS OBJECTIVES

- **Schedule**
  - January 1, 2015 – Provide ISU Athletics Go/No Go on Season Tickets
  - Coordinate Outside Vendors work
    - Video Board/Concourse Audio, DAS, Wireless, Fiber
    - Push Activities Early – Complete dust/heat/air conditioned rooms for owner occupancy
    - Green Space Connection / Parking Lot Turn over / Dedication Event
- **Budget**
  - October 14, 2014 – Complete Budget Update
  - Change Management - Remain up to date on all changes
- **Fan Experience**
  - 2014 Season – Provide a fan experience not impacted by Construction
  - 2015 Season – Wow ISU fans with a first impression while welcoming both in State Schools
- **Project Performance**
  - Making sure “the finishing product works” takes precedence over “finishing the work”
  - Soft Start Systems
    - Dialed in on the HVAC , Food Service, AV, & Electrical
- **Team Effort**
  - Collaborate Daily with all team members

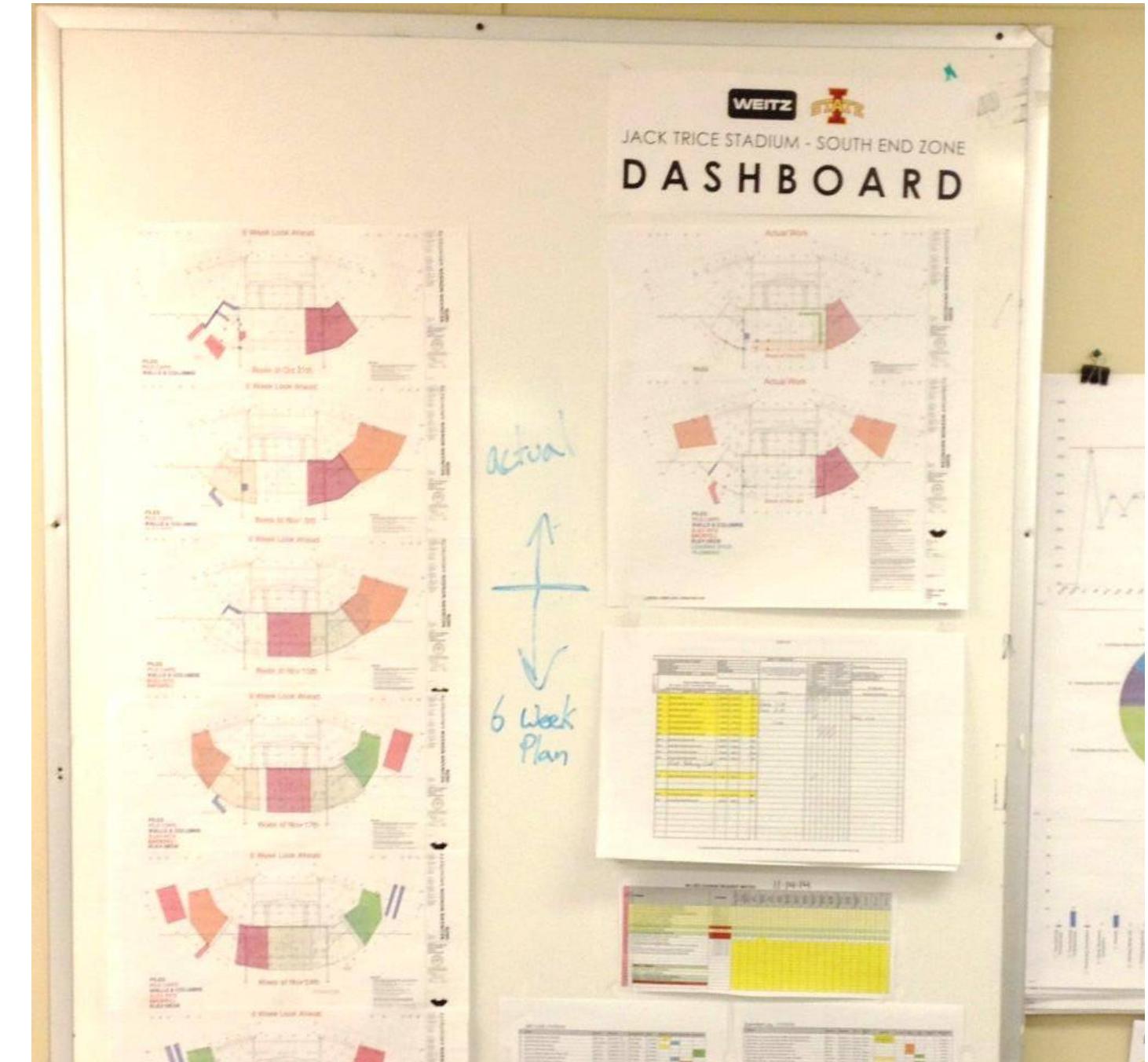
# Daily Standup Meetings

- Value of an Owner Daily standup meetings
  - Commitment to Decision Making
  - Create an action plan to drive results
  - Streamlines communication
  - 24 hour decision turn around
  - Peer pressure
  - “Productive Paranoia”

ISU SEZ			Schedule Dashboard	Delta
<b>Action Item List - Daily Standup Meetings</b>			Club Building/Kitchen- 8/11/2015 - (9/15/15)	25
<b>March 13, 2015</b>			Concourse/Hillsides - 8/24/2015 - (8/10/15)	-9
Date of Issue	Item	Responsible Party	Action to be Taken	Completion Date
<b>The Weitz Company/Prime Contractors</b>				
12/27/14	3rd Party Envelope Consultant	Weitz-Ben/Bob	Details are worked through, MAGS is updating there shops. Ben to write Wes Higgins a Contract. Wes Higgins will visit on 3/12/15 to review installation. All meeting minutes will be uploaded to centric. <b>Josh visited the site 3/12/15, worked through sevreal details with openings. Will come back next week to inspect air barrier.</b>	
1/22/15	Temp Cooling	Weitz - Ben/Matt T	Ben is finalizing the commissioning schedule and milestones. Working towards 6/1/15 temp cooling with final systems. Weitz is also looking into temp units as a backup plan.	
3/3/2015	SW Electrical Shut down	Weitz - Bob	Working on developing a timeline to shut down the SW side of the stadium. Electrical will likely be down for a week in this area.	
<b>Design Team</b>				
1/12/15	Lower & Upper Level Bar/Interior Release	NM - Bill H	3/3/15 - Floor Plan to be issued out showing wall changes; 3/4/15 - Feature stair reengineering complete releasing handrail and stair shops; 3/6/15 - Millwork changes issued out - Upper bars, upper bar tops, lower bars, and space between lower bars to be included. 3/9/15 - Sukup field trip to review millwork and procurement; 3/10/15 - Bathrooms including Mirrors, countertop supports, Tile and Sinks; 3/13/15 - Bluing Steel Changes - Handrail, Elevator Channels, corner guards, and any other misc changes picked up. Chris, Ben, Bob, the design team, and Jon and Jason to attend sukup tour 8:30 monday. <b>After the tour, the design team will finalize bars and issue, Tuesday 3/10/15. Change documents 3/13/15?</b>	
<b>Owner Items</b>				
10/30/14	Kitchen Equipment Procurement & Schedule	ISU - Chris/Kathy	Purchasing/Athletics to provide a spreadsheet with the differences between basis of design and the awarded equipment. This will help identify power and water changes early. Final vendors have been confirmed, Meeting with all of them Friday afternoon.	
3/4/2015	Spring Football Game	ISU- Chris	Weitz to confirm ISU athletic and fan experience needs	
<b>Schedule Items</b>				
2/10/15	Scoreboard engineering	NM - Kim	Kim is working on getting a letter regarding the 6 scoreboard columns.	
<b>Budget</b>				
<b>Submittals/RFI's</b>				
2/24/15	Submittal Approvals	NM - Bill H	2-3 pages of submittals are still in for review. Goal was to be out of submittals in Feb. Lots of work still out there to get this completed. <b>NEW GOAL: Submittals complete by end of March. Submittal and RFI call sessions.</b>	
<b>Changes</b>				
2/9/15	Lower Bowl Bleacher Color	NM - Bill	NM to issue a change for this material being colored and finished. This material has been released to meet schedule.	
<b>Future Items of Concern</b>				
3/10/15	Parking now available for foremen in lot S-1	Weitz - Bob	ISU parking passes?	
3/10/15	Keep materials off sides of roads, keep roads clean	Weitz - Bob	On going site organization	

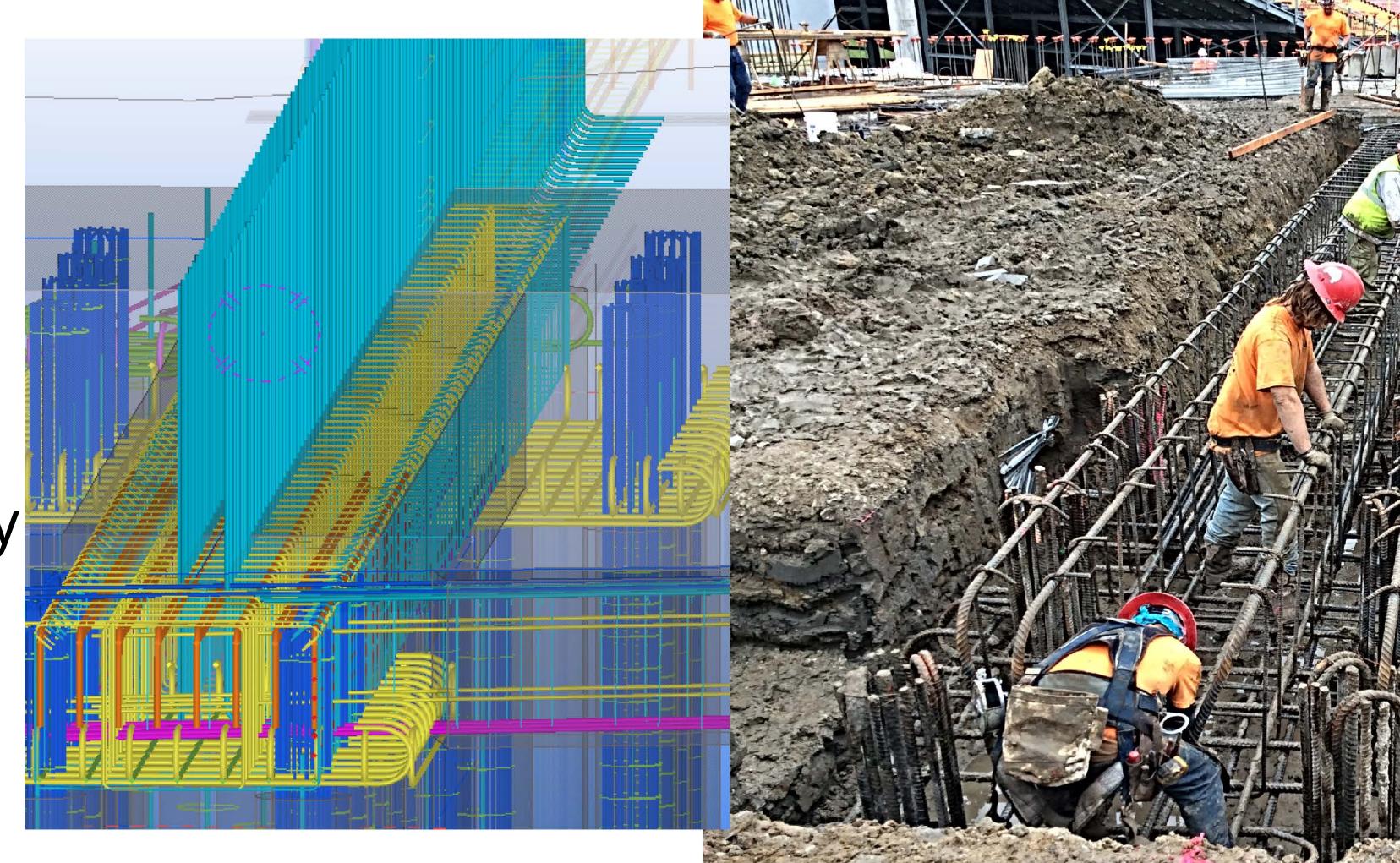
# Posting a Project Dashboard

- The “Pulse” of the Job
  - Holds People Accountable
  - Stakeholders can change the projects course
  - Ask yourself “Why” & correct Trends
  - Its not a blame game - Enable others to understand potential pitfalls
  - Be Honest with Yourself & Others



# Going Electronic & Cloud-Based

- **Virtual Design in Construction**
  - 4D Model Simulation
  - In-House reinforcing detailing
  - Total Project Clash Detection
- **Cloud Based Drawing**
  - 6 week look-aheads by area
  - Quality control tracking
  - RFI, ASI and changes posted by one person for all to see
- **Cloud-based Closeout**
  - Multiple staff members working with multiple design team members



# Closing Comments

