Pull Planning and Schedule Collaboration in a Virtual World

Northern California CoP

7/15/20
Meeting Agenda

Tonight’s Presentation

Pull Planning and Schedule Collaboration in a Virtual World

• 3:30 – 3:40 – Welcome & Announcements

• 3:40 – 4:00 – Small group break-outs / Critical question:
  • What is something that is easy, what is something that is hard in the new situation?

• 4:00 – 4:45 – Feature Presentations:
  • Paulo Napolitano
  • Ron Migliori
  • UCDH Eye Center Team

• 4:45 – 5:00 – Questions and Answers from chat, Plus/Delta
For Q&A and Plus/Delta

Leveraging the Chat function of Zoom, please enter your questions or plus/delta as we go. The moderator will administer the Q&A after the session

• For a **question** please format like this:
  • ? What is the role of a facilitator?

• For a **plus** please format like his:
  • + Really liked the panel format of the presentation

• For a **delta** please format like this:
  • - The moderator was on mute half the time.
Join LCI!

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• Academic: $75 (Faculty)/ $50 (Student)

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• Access to Members-Only Website for materials, forms, training materials etc.
• Reduced fees for LCI Seminars, Workshops and Research Meetings.
• For additional benefits, information and to sign up, go to: WWW.LEANCONSTRUCTION.ORG
Available LCI Books to Order

Transforming Design and Construction: A Framework for Change
WILLIAM R. (BILL) SEED, Executive Editor
Pricing (up to 6 copies):*
Non-member: $53/ea.
Member: $33/ea.

LCI Special Edition: This Is Lean
NIKLAS MODIG & PÄR ÅHLSTRÖM
Pricing (up to 6 copies):*
Non-member: $29/ea.
Member: $24/ea

Target Value Delivery: Practitioner Guidebook to Implementation – Current State 2016
Kristin Hill, Katherine Copeland and Christian Pikel
Pricing (up to 6 copies):*
Non-member: $52/ea.
Member: $33/ea.
SAVE THE DATE

22ND

LCI CONGRESS

OCTOBER 19-23, 2020
Detroit, Michigan

www.lcicongress.org/2020/

MARK YOUR CALENDARS! The 2021 LCI Congress will be held from October 18-22 in Phoenix, Arizona.
Feature Presentation – Team 1
LAST PLANNER SYSTEM
BEFORE AND AFTER COVID-19

By: Paulo Napolitano
7/15/2020
What we’ve learned so far:

As the Team move towards virtual meetings a clear communication plan needs to be in place.

The team needs to establish rules for participation in these meetings.

Facilitator needs to keep people engaged

We have different technologies available for virtual meetings
Feature Presentation – Team 2
Virtual Pull Planning - Agenda

• Last Planner System
• Pull Planning Process
  • Pull Planning Prep
  • Pull Planning Session
  • Pull Planning Check-in
• Virtual Pull Planning Tools
  • Smartsheet
  • Visio
  • Bluebeam
  • vPlanner
Virtual Pull Planning – *Last Planner System*

**5 Connected Conversations**

**SHOULD**
- Master Scheduling Milestones
- Phase “Pull” Planning

**CAN**
- Lookahead Planning

**WILL**
- Weekly Work Planning

**DID**
- Learning

- Set milestones & strategy
- Identify long lead items
- Specify handoffs
- Identify operational conflicts
- Make work ready & Launch re-planning when needed
- Promise
- Measure PPC & act on reasons for failure to keep promises
Virtual Pull Planning - Prep

- Master Plan – Milestone Schedule
  - Establishes the strategy to deliver the project
  - Big chunks of time for major milestones over the whole project duration
- Establish the deliverables in detail for the first milestone to pull
  - 4 to 8 weeks maximum duration
- Fill out the homework to establish your idealized design workflow
  - Identify what you need from others in order to do each task
  - Team check-in to review all homework
Virtual Pull Planning - **Prep: The Homework**

- Define your COS (Conditions of Satisfaction/Deliverables)
- What you will provide
- What you need
- Establish your workflow

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**Pull Planning - Discipline Worksheet**
**UHS Spring Valley Hospital**
**Phase/Pulse:** Renovation Design - Materials Management

**Deliverables:** Conditions of Satisfaction

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**Workflow**

- **Supplier:** What I will provide
- **Customer:** What I need
Virtual Pull Planning - Prep

• Fill out your activity tags for the Pull Plan session from your homework
  • Fill out the Bluebeam template tag or hand write and take photo of each
• Prepopulate the Bluebeam Pull Plan banner in your swim (commitment) lane
  • Place at a 45 degrees until committed
  • Lay out tags to define the flow of work in approximate timeframes
Virtual Pull Planning – *Pull Plan Session*

- **Pull Plan Session**
  - Each discipline quickly describes their design process
  - Start with the architect’s flow first
- Build the plan around the architect’s idealized workflow pulling from the end
  - Architect makes request of others to fulfill their needs (constraints)
  - Disciplines place appropriate activity tags or creates new tags to fulfill the requests
  - Straighten tags if it can be committed (and there is no constraints)
- Each discipline follows the same procedure until the pull plan is completed
Virtual Pull Planning - Check-in

- Review that past week of commitments by discipline
  - Cross off tags that were completed and accepted by the customer
  - Re-plan tags that were not complete and record the variance (reason for not completing the activity tag)
  - Capture Percent Planned Complete (PPC)
- Lookahead review for each discipline
  - Identify constraints and re-plan if necessary prior to committing
  - Commit to the next week’s work activities
Pull Planning Tools – **Smartsheet**

### Pros
- **Common Software** – Smartsheet
- **Similar to an Excel spreadsheet**
- **All have access**
- Creates dependencies and missed commitments will push out end dates
- **Virtual Check-ins**
- **Notifications for handoff acceptance**
- **Can deposit documents in software**
- **Comment field for additional info**
- **Gantt chart option to see handoffs**

### Cons
- **Not as visual as activity tags – List form**
- **Manual PPC**
- **Does not determine critical path**
- **Best for simple/small projects**

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**Table:**

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<th>Duration</th>
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</table>
Pull Planning Tools – **Visio**

**Pros**
- Common Software – Visio
- Output activities in Excel spreadsheet
- Visual (can issue PDF’s)
- Electronic Activity Tags
- Virtual Check-ins
- Generates PPC

**Cons**
- Requires one person to input/maintain/update program
- Complicated application
- Does not determine critical path
- No record of changes
Pull Planning Tools – Bluebeam Session

Pros
• Common Software – Bluebeam
• All have access
• Visual (Can print lists)
• Electronic Activity Tags
• Virtual Check-ins

Cons
• Manually count PPC
• Does not determine critical path
• No record of changes
Pull Planning Tools – vPlanner

Pros

• Easily handles complicated Pull Plans
• Determines Critical Path
• Visual – Dynamic graphics (layout, filters, swimlanes)
• Can isolate workflow threads to identify handoffs/dependencies
• Electronic Activity Tags
• Virtual Check-ins
• Generates PPC
• Captures changes to the plan

Cons

• Requires one person to input/maintain/update program
• Complicated program
• Requires subscription (cost)
• Uncommon Software – Learning Curve
Virtual Pull Planning - **Tools**

**Conclusion**

- Prepare for a Virtual Pull Plan Session as if it were in-person
  - Understand your design flow
  - Identify what you need from others
  - Fill out activity tags for what you will provide
- Select a tool that fits your project’s complexity
- All tools discussed can be used successfully
- Stay true to the Last Planner System
- Make adjustments for continuous improvement
Feature Presentation – Team 3
UC DAVIS HEALTH ACC EXPANSION EYE CENTER
THE BIGROOM MEETINGS

- IN PERSON PLANNING WEEKLY
- IN PERSON PULL PLANNING SESSIONS
- TRADITIONAL STICKY NOTES
- BREAKOUT SESSIONS AS NEEDED
DIGITAL SOLUTION

• Needs
  • Quick Implementation – Low Cost – Minimal Learning Curve – Intuitive (emulate in-person methods)

• Solution
  • Bluebeam & Virtual Meeting Platform

• Process
  • Manageable Chunks (Milestones)
  • Pre-plan w/ Key Team Members
  • Pull it all together as a Team

• Daily Check-ins
  • The most productive 15 min. of the day
RELIABLE COMMITMENTS
THE OWNER’S PERSPECTIVE

- Daily Check-ins
- PPC & Incentives

- Team-Based Planning
- Predictability of Outcomes
Key Take Aways, Questions & Answers
THANK YOU!

Adjourned – Drive Injury Free

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