

January 20, 2020

Lean Construction for Trades Toolbox Talk Series

Developed by the AGC Lean Construction Forum



.25 CM-Lean CE Credit | AGC of America recognizes this this series as qualifying for continuing education hours towards the renewal of AGC's Certificate of Management-Lean Construction (CM-Lean).



Lean Construction for Trades Toolbox Talk Series Goals

- O Introduce Lean Construction concepts in the field through conversational learning
- Recognize opportunities to review and improve current processes
- O Describe how to empower each other to identify and eliminate waste, work safely, and reduce overproduction
- O Adopt a Lean culture



Lean Construction for Trades Toolbox Talk **Session Goals: Visual Communication Tools**

- Learn how to establish better commitments and a more reliable workflow in the field
- Learn how to bridge communication gaps more effectively
- Learn how to increase accountability amongst all field team leaders

"Visual Communication Tools" developed by Joe Donarumo, LINBECK





Visual Communication Tools

- O Why are visual communication tools effective?
- How can visual communication tools enhance engagement and buy-in with trades?
- What role do visual communication tools play in teambuilding?
- How can you help make visual communication tools more beneficial to the team & project?





Floor Plans/Elevations Under Laminate + Dry Erase Markers

Dry erase markers - different color per trade

Trade partners visually & verbally tell the team:

- 1. What they are working on;
- 2. Where they are working;
- 3. How many crews/workers are on-site;
- 4. Where there are constraints;
- 5. What material deliveries are coming up.







By using dry erase markers that are color-coded to their work, marking up the floor plans on the wall as a team is one of the simplest ways to visually communicate all planned activities with all construction trades on the jobsite.

Material Delivery Board



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DELIVERY BOARD	9 10 11			16	
	Monday	Tuesday	Wednesday	Thursday	
Company/Trade	FUJI FILM		PUNTING GEAR		
Foreman Name/Phone Number	DAVID - BIT 213 7662. RAD ROOM EQUIP.		DE BIT ZIS TWEE		
Materials Being Delivered	RAD ROOM EQUIP.		CONNEX DE-MUB		
Delivery Time	8AM		9 1101		
Delivery Company Name	FUJI		RYNATHU GENR		
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Unload Area	WEST DOORS		MUETH, SIDE		
Unload Method	SKYTEACK		NIA		
Company/Trade	ARCH FAB				
Foreman Name/Phone Number	DAN 817 219 0808				
Materials Being Delivered	CANCRY				
Delivery Time	7 AM				
Delivery Company Name	ARCH FAB				
Truck Type	16' TRATIER				
Unload Area	EAST SIDE				
Unload Method	SELD STEEL				
Company/Trade					
Foreman Name/Phone Number					
Materials Being Delivered					
Delivery Time					
Delivery Company Name	The state of the s				
Truck Type		Andrew Control of the			
Unload Area	Walter States				
Unload Method					

Room for each day of the week

Space for multiple deliveries

Used to help the trades answer the following:

- 1. What is being delivered?
- 2. What time is it being delivered?
- 3. What company is delivering it?
- 4. What type of truck is it coming in?
- 5. Where will it be unloaded?
- 6. How will it be unloaded (by hand, by lift, by crane, etc.)?

By communicating this information visually, all team members know the logistics of building materials coming onto the site. These boards also ensure that project deliveries are "just in time," which is a system for producing or delivering the right amount of parts or product at the time it is needed for production.

Inspections Board





Inspection boards can help everyone onsite know when project inspection dates are occurring and what the current status is, which can help with productivity onsite.

Room for each day of the week

Space for multiple inspections

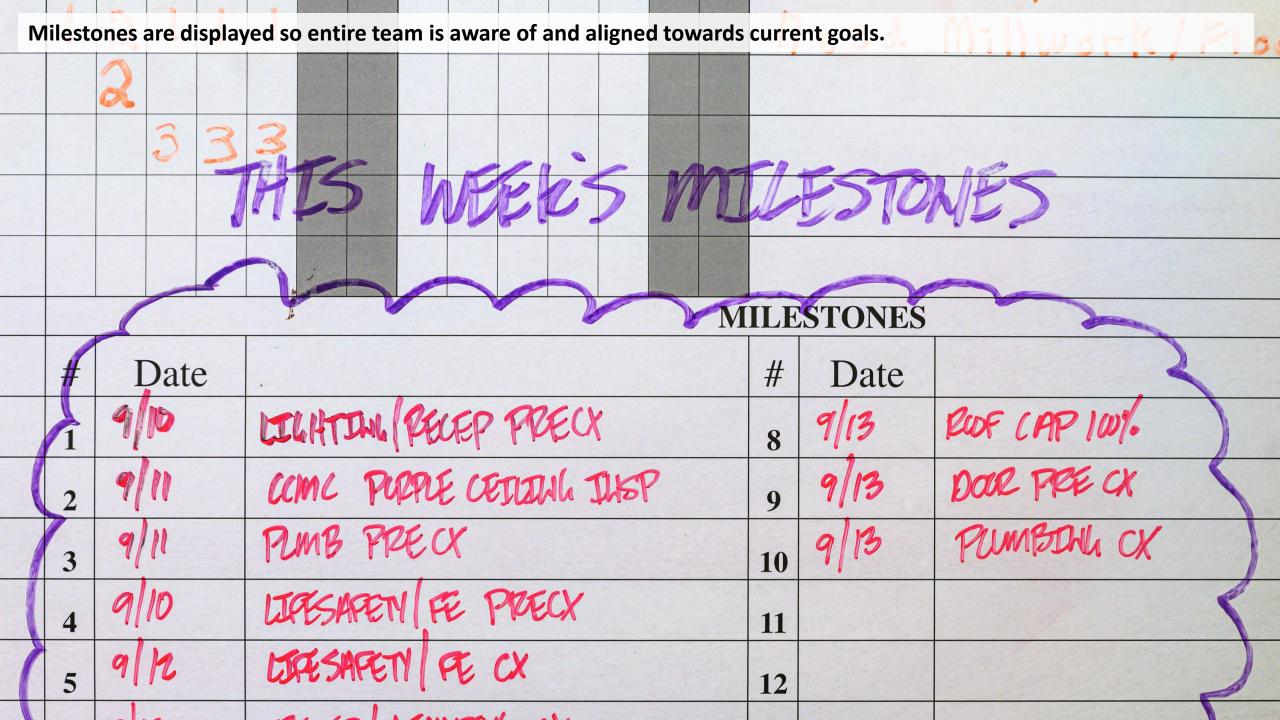
Used to answer the following questions:

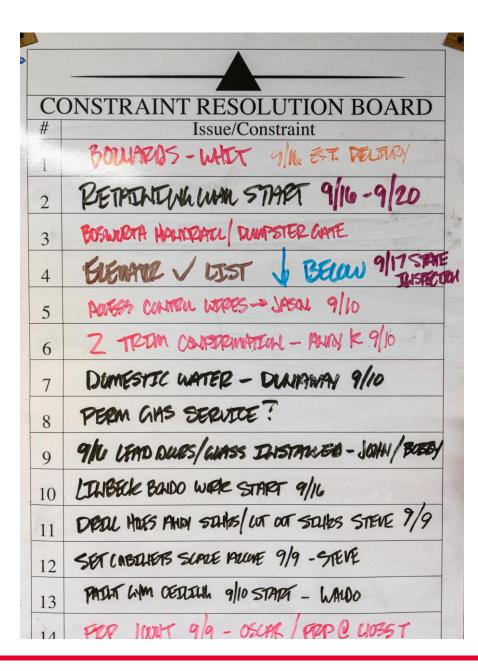
- 1. What is the inspection/what is being inspected?
- 2. Who requested the inspection?
- 3. What date/time was the inspection requested?
- 4. What date/time will the inspection occur?
- 5. What are the results of the inspection?



Lean Dashboards / Look-Ahead Scheduling









Constraint Board

Dry erase markers - different color per trade

Trade partners make commitments to entire team

Constraint boards track:

- What the constraint is
- 2. Where it is occurring
- 3. Who is responsible for resolving it
- 4. When it will be resolved

Constraints will be identified during the normal course of conversation during your trade partner meetings / daily huddles. How diligent and thoughtful you are about capturing and organizing these constraints will determine how successful you are in making the board effective.





Next Steps/Application:

- 1. How can you make your jobsite/workplace more visual?
- 2. What is the most important thing your team struggles to communicate? Start there!
- 3. Involve your entire team!





- Establish and maintain a reliable workflow in the field.
- 2. Bridge communication gaps and facilitate better trade to trade communication.
- Build accountability amongst all team members.
- 4. Keep it simple and effective! Focus on what's important to the team!

Printable Card

Visual Communication Tools