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Pull Planning Playbook

for Foremen and Superintendents

LEARN THE COACH'S X'S AND O'S TO PULL LIKE PROS

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4P Model of Lean



Executive Summary

PEOPLE AND PHILOSOPHY

Pull Planning is not business as usual. Like studying a map before entering unfamiliar territory, you have to orient yourself to the lay of the land at the start. If you don't learn it correctly and alter your thinking and behavior, you'll struggle and revert to your old ways.

You're going to be thinking and acting in ways that will seem awkward at first. Moving from the *command-and-control* style of conventional supervision to the *collaborate-and-confer* style of lean supervision is not easy. This is no longer "the way we've always done it".

You will gain control by giving up control: you'll learn to ask relevant questions, rather than give orders. You'll ask, "What I can do for you?", rather than say, "Here's what you're doing next." Here are some examples of the behavioral shifts vital to performing lean:

There's a right way and a wrong way to Pull Plan.

MODERN SUPERVISION	LEAN SUPERVISION		
Authority: You own it.	Responsibility: I own it.		
Results: I don't care how you get there, just get there.	Process: The method should be visible, standard, and repeatable.		
Give Answers: I know best. Listen to me first.	Ask Questions: You know what you're doing. I'll listen to you first.		
Plans: Stick to the Master Schedule. It's "gospel".	Experiment: Shit happens. Try new things.		
Formal Education: Book and classroom knowledge.	Workplace Learning: Learn by doing and teaching others.		
Management Improves Processes: We're smarter. Do what we say.	Trades Improve Processes: You're the expert in your job. We'll do what you say.		
Decisions Made Remotely with Second- Hand Data: In an office with a report in hand.	Decisions Made in the Field with First-Hand Data: In Gemba with your eyes and hands on the work.		
Standardization by Management: We're the brains of the operation. You're the hands.	Standardization by Trades: You're closer to the work and know better how to do it.		
Go Fast to Go Slow: Hurry up and wait or work-around.	Go Slow to Go Fast: Level workflow for steady production.		
Management Commands: All decisions are made by the boss.	Workers are Empowered: Trade workers make decisions.		

There are many emotional obstacles to shifting behavior and getting buy-in for Pull Planning. These obstacles are often expressed in the common phrases of "I've got this" or "We already do this." Overcoming these obstacles requires openness, courage, and the willingness to say "I don't know".

The three most common human conditions that will undermine your lean efforts are:



- 1 Vulnerability
- (2) Apathy
- (3) Resistance

It's vital to acknowledge, address, and defuse these sooner rather than later. These conditions are not the focus of this manual. However, you need to examine them after you've had some repetitions and become familiar with how (and how frequently) these behaviors play out in each situation.

In the meantime, remember this: to Pull Plan successfully, we must keenly observe our co-workers, and exercise self-awareness and empathy. Making and keeping promises is the heartbeat of this process. We must nurture and reinforce this emotional behavior, as it drives accountability and builds trust.

"All things are rooted in trust."

- STEPHEN M.R. COVEY

More than understanding the technical details of our daily work, we must know ourselves and create brotherhood, respect, and understanding between people. This is the higher level of social behavior that's needed to apply Pull Planning effectively, and inspire others to continuously improve.

Where there is vulnerability, empower people by granting them the freedom to openly speak their minds and to make mistakes without negative repercussions. Where there is apathy, enlighten and teach the values and benefits of the process. Show others what it means for them. Where there is resistance, seek to understand the root cause and find common ground. Enlist the resisters' peers to bring them along.

PROCESS AND PROBLEM SOLVING

Pull Planning is a standard, repeatable, weekly process for planning and controlling work and building teams. *Planning* is what is to be done and how. *Control* is executing. They are inseparable. A project is under control when we do what we promised to do, and keep a sharp eye out to foresee problems.

The process has five sequential planning stages, explained in detail in this book:

- 1 Milestone Planning
- 2 Phase Pull Planning
- Six Week Lookahead Planning
- 4 Weekly Work Planning
- (5) Check and Adjust Planning

If the assignments posted on these plans are executed in the field, they create continuous workflow and reduce waiting. As my good friend, Professor Tariq Abdelhamid of Michigan State University, says: "Workers won't be waiting for work and work won't be waiting for workers." Downstream trades will get what they want (work and materials), when they want it, and in the quantity they want.

Work in progress and inventory are minimized or right-sized, and material and information are released only upon demand. Planners, support staff, and management collaborate regularly with the field workers and their leaders. They observe work firsthand— exposing

problems and discussing them with everyone affected, then fixing them pragmatically and quickly.

We reflect constantly on our planning and production processes to learn and openly identify any shortcomings of the project. Then we develop countermeasures to avoid making the same mistakes again. "Rich's playbook speaks the language of construction workers. He shares a message that resonates and identifies well."

HENRY	G.	NU	TT,	Ш

Sheetmetal General Superintendent Southland Industries

"The 'Pull Planning Playbook' is your road map to 'lean' success! It lays the foundation in a straightforward, easy-to-understand direction. Working with Rich and adopting the lean process has changed the way I do business, and I will never look back!"

JOHN T. BANTA

BV Project Team
The Whiting-Turner Contracting Company

Rich is the founder of Unified Works, Inc, a lean construction consultant. Since 2012, he has lectured on lean and coached on over \$3 billion in projects around the country. He is an Adjunct Professor at Northwestern University, McCormick School of Engineering (Master of Project Management and Executive Management and Design Construction Programs), where he has developed and taught lean construction curriculum.



