

Last Planner System®
Standard Work
1_Introduction & Principles

Introduction:

The Last Planner System® (LPS®) promotes conversations between trade foremen and site-management at appropriate levels of detail and before issues become critical. These conversations increase the chances that work flows reliably, and recognizes that personal relationships and peer pressure are critical to that process.

Last Planner System® of Production Control was developed to make planning processes and workflow highly reliable and to build necessary trust within a collaborative team environment. The Last Planner System® makes detailed plans by those whom execute the work. It reviews the plan near its execution, specifically for collaborative planning to remove constraints as a team and verify that the promises made are tied to milestones and that these commitments are firm, timely and without ambiguity.

It is a planning, monitoring and production control system that follows Lean construction principles such as Just-In-Time (JIT) delivery, value stream mapping (VSM) and pull planning.

Pull planning itself is a procedure of creating a milestone plan, a lookahead plan and a commitment-based weekly work plan through front-end planning using Lean construction planning techniques.

Weekly work planning is referred to as “commitment planning” because specific resource assignments need to be made at this stage so that work can actually be performed. Effective weekly work planning is the foundation upon which trust within the team is built.

The primary function of LPS® is the collaborative planning process that involves Last Planner®s (LP™) for planning in greater detail as a team gets closer to doing the work. The Last Planner System® is an opposite way of thinking when compared to conventional “push scheduling” principles where the work that SHOULD be done is planned in weekly meetings emphasizing adherence to the master schedule milestones.

In contrast, LPS® incorporates pull planning principles where only the work that CAN and WILL be done is considered and promised by Last Planner®s (LP™) themselves.

Because at its core, LPS® is a “system view” versus “local optimization,” the Last Planner®s’ active engagement in this systematic process is fundamentally *a requirement*. In other words, the Last Planner System® is a team sport.

Constraint analysis is an integral part of LPS® that is applied as a proactive approach to problem solving as a team, despite the typical challenges faced on construction projects.

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Principles of Last Planner System®:

1. Plan in greater detail as you get closer to doing the work.
2. Produce plans collaboratively with those who will do the work.
3. Reveal and remove constraints on planned tasks as a team.
4. Make and secure reliable promises.
5. Measure promises kept (planning capabilities, PPC) in order to improve by learning from variance (workflow disruptions).
6. Continuously improve as a team, remove waste and adjust performance based on what has been learned as a means to optimize workflows.

Figure 1: Last Planner System® Overview

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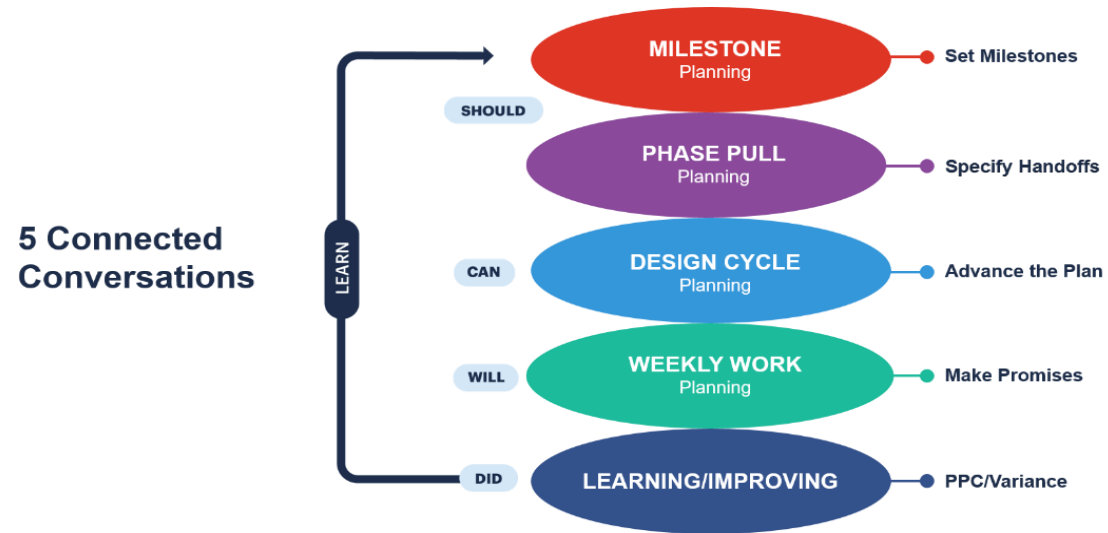


Figure 2: Levels of Granularity

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Milestone Planning



Boulder

Phase Pull Planning



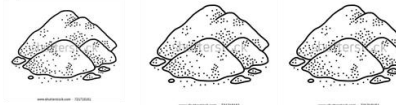
Rock

Lookahead Planning



Pebble

Weekly Work Planning



Sand

Standard Work for Last Planner System® includes the following:

- 1_LPS® Introduction Principles (this document)
- 2_LPS® Pull Planning Session Invitation
- 3_LPS® Planning Session Preparation
- 4_LPS® Milestone Planning
- 5_LPS® Phase Pull Planning
- 6_LPS® Tag Preparation
- 7_LPS® Lookahead Planning
- 8_LPS® Constraint Log
- 9_LPS® Weekly Work Planning
- 10_LPS® Daily Huddle
- 11_LPS® Percent Plan Complete-PPC
- 12_LPS® Reasons for Variance