FERNDALE Refinery
TIER 3 LSR HYDROTREATING
Overview of the Last Planner® System

March 20, 2018

By
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The Current State (for some)
SHOCKWAVE TRAFFIC JAMS RECREATED FOR FIRST TIME

Footage courtesy of University of Nagoya, Nagoya, Japan
The Big Room Concept
Commitments

Projects are networks of commitments
Frequency with Which Projects Meet Expectations

Pull vs. Push
Pull vs. Push
Schedule Performance

• Research by Glenn Ballard and Greg Howell indicated only 54% of planned weekly activities get completed on average.

• Last Planner® pull system – a better way (typically 80-90% percent promises kept)
Last Planner® System

Who are the Last Planners?
The foremen and superintendents/site managers

5 Major Elements of System

1. Master Scheduling – setting milestones
2. Phase (Pull) Planning – specifying handoffs
3. Make Work Ready Planning – 6 week look-ahead
4. Weekly Work Planning
5. Learning - Measure Percent Promises Complete, conduct root cause analysis and act on reasons for failure to keep promises

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Last Planner® System Principles

1. All plans are forecasts and all forecasts are wrong. The longer the forecast the more wrong it is. The more detailed the forecast, the more wrong it is.
2. Plan in greater detail as you get closer to doing the work.
3. Produce plans collaboratively with those who will do the work.
4. Reveal and remove constraints on planned tasks as a team.
5. Make reliable promises.
6. Learn from breakdowns.

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Last Planner System

- **Master Schedule**: Set milestones and key dates
- **Phase Schedule**: Specify handoffs between trades
- **Look-Ahead Plan**: Make ready and initiate re-planning as required
- **Feedback & Learning**: Measure progress and remedy issues
- **Weekly Work Plan**
- **Progress Tracking**

Source: Adrian Smith (2011)
Servant Leadership

“What do you need from me to do your job?”
Milestone Planning
Pull Planning Activities
6-Week Make Work Ready Plan
6-Week Make Work Ready Plan
Weekly Progress Meeting

Weekly Work Plan
Categories of Variance

1. Bad Planning
2. Prerequisite Work
3. Design issue
4. Work force not available
5. Approvals
6. Changes
7. No update (missing info)
8. I forgot
9. Unforeseen Conditions
10. Communication (poor or missed)
Project Wildcat
Sample Variance Analysis - Missed Commitments
Pareto Chart

Focus attention this side of line
Your Lean Coaching Consultants

“Helping Deliver Better Projects, Performance and Results”

The Last Planner®
System in Action

https://www.youtube.com/watch?v=i4VAYkJMMYg
Questions?

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