



Leadership and Lean Principles in Construction Management Training Course



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Leadership and Lean Principles in Construction Management Training Course is a 5-day course on leading construction teams with Lean construction methods to remove waste, stabilize work plans and reduce rework. It is designed for project managers, site managers, planners and contractor leaders who direct work on site. You complete and take back the Lean Site Leadership Plan, built on a live project. The course is delivered by Mercury Training Center.

About This Course

Construction projects lose time and money to waiting, rework, unreliable handoffs and plans that crews do not commit to. To follow this course, you should already plan or supervise construction work. You practice by mapping site processes, running pull planning sessions, coaching crews at the workface and leading improvement routines.

Who It Is For

- Managers responsible for delivering construction projects on time, within budget and to quality requirements
- Supervisors responsible for daily site production, crew coordination and work area readiness
- Planners responsible for master schedules, phase plans and short-interval lookahead planning
- Engineers responsible for design coordination, technical submittals and constructability on site
- Contractor and trade partner leaders responsible for crews, workflow commitments and handoffs

This course is not for readers who need a first grounding in project scheduling and cost control, who are better served by a foundation construction project management course, nor for readers seeking detailed contract administration skills, who are better served by a construction contracts course.

Competencies You Will Build

- Lean Leadership Behavior: you lead from the workface, ask before telling and build trust between crews and trades
- Waste Recognition: you spot the eight wastes in site processes and remove their causes rather than their symptoms
- Collaborative Planning: you run pull planning and lookahead sessions that produce reliable crew commitments
- Flow Management: you make work ready, remove constraints early and keep handoffs between trades stable
- Performance Measurement: you track plan reliability and reasons for missed commitments to guide action
- Continuous Improvement: you lead short improvement cycles and standardize what works across the project

What You Will Be Able to Do

By the end of the course you will be able to:

- From a site process walk, produce a value stream map that separates value-adding steps from waiting, movement and rework
- Given a project milestone, facilitate a pull planning session that sequences trade handoffs backward from the milestone
- Using a six-week lookahead, screen activities for constraints and assign owners to clear them before work starts
- Given weekly work plan results, calculate percent plan complete and classify the root causes of missed commitments
- From a recurring site problem, run an A3 problem-solving cycle and present countermeasures to the project team
- Using daily huddle notes, coach a crew leader on commitment, safety and quality conversations at the workplace

Course Content

Day 1: Lean Thinking in Construction

- Lean Construction Principles of Value, Flow, Pull and Perfection on Projects
- The Eight Wastes in Construction Site Processes
- Traditional Versus Lean Project Delivery and the Cost of Variability
- Lean Culture, Respect for People and Psychological Safety on Site
- Lean Readiness Assessment for Project Teams and Trade Partners

Day 2: Leading People the Lean Way

- Lean Leadership Roles from Project Manager to Crew Foreman
- Gemba Walks and Leading from the Workface
- Coaching Questions for Site Supervisors and Engineers
- Building Trust and Reliable Promises Between Trades
- Daily Huddles and Visual Management Boards on Site

Day 3: The Last Planner System

- Last Planner System Levels from Master Schedule to Weekly Work Plan
- Pull Planning Sessions for Milestones and Phase Handoffs
- Six-Week Lookahead and Constraint Analysis for Make-Ready Work
- Percent Plan Complete and Reasons for Variance Tracking
- Linking Lean Planning with Critical Path Schedules

Day 4: Flow, Quality and Improvement

- Value Stream Mapping of Site and Supply Processes
- 5S and Standard Work for Site Logistics and Laydown Areas
- First Run Studies and Built-In Quality to Prevent Rework
- A3 Problem Solving and Root Cause Analysis for Site Issues
- Kaizen Cycles and Measuring Lean Performance on Projects

Day 5: Applied Lean Leadership Practice

- Exercise Mapping a Site Process and Prioritizing Waste Removal
- Exercise Facilitating a Pull Planning Session with Trade Leaders
- Exercise Coaching a Crew Leader After a Missed Commitment
- Sustaining Lean Practices Across Project Phases and Subcontractors
- Completing the Lean Site Leadership Plan

Case Studies and Exercises

The following are suggested activities used during the course.

- Case study: a hospital building project where finishing trades keep waiting for inspections; you identify the wastes and decide which constraints to clear first.
- Case study: an industrial plant expansion with frequent rework on piping supports; you run an A3 analysis and select countermeasures.
- Exercise: a residential tower team pulling the plan toward a floor handover milestone; you sequence trade handoffs and secure commitments.
- Exercise: a road and utilities project with falling plan reliability; you analyze variance reasons and plan the next improvement cycle.

What You Take Back

You return with the Lean Site Leadership Plan, built around a live project. In your first month back, you use it to run the first pull planning session, start daily huddles, track plan reliability and agree improvement priorities with trade leaders.

- Value stream map with prioritized waste removal actions
- Pull plan and six-week lookahead with constraint log
- Plan reliability tracker with variance categories
- Leadership routine for huddles, Gemba walks and coaching

Quick Answers FAQ

What should I know before lean construction leadership training?

You should already plan or supervise construction work and read basic schedules. No prior Lean training is needed, since the principles are built up from the start before you apply them to site situations.

How does lean construction leadership training differ from general construction project management training?

General construction project management training covers scope, cost, schedule and contracts. This course focuses on how leaders run collaborative planning, remove waste and build reliable crew commitments with Lean methods on site.

How does the Last Planner System improve construction schedules?

The Last Planner System improves schedules by having the people who do the work plan it, clearing constraints before work starts and measuring how many weekly commitments are kept, so causes of delay are found and fixed early.

What do I take back from leadership and lean principles in construction management training?

You take back the Lean Site Leadership Plan, built on your own project, with a value stream map, pull plan and lookahead, plan reliability tracker and leadership routine.

For Your Manager

After the course, the team member will be able to lead collaborative planning with trades, remove waste from site processes and track plan reliability to reduce delays and rework. They return with the Lean Site Leadership Plan, first used to run a pull planning session and set up daily huddles on a current project.