

Lean Construction Institute

Building Knowledge in Design and Construction

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Provider Name: Lean Construction Institute

Provider Number – H561

Course Name: Improving the Way we Work: Implementation of Lean on Projects, Case Studies and Lessons Learned.

Course Number – 20121011AM

Course Speakers: Bernita Beikmann, Digby Christian, Ken Lindsay, Paul DeChant, James Grossman, Chris Dierks, John Hugget, Sam Moses, Brian Lightner, Brad Carter

Course Date: October 11, 2012



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Course Description

This session incorporates testimonies and case studies from participants in projects that used lean methodologies to improve the design of their facilities and change the way they deliver a project in design and construction. The case studies will dive deep into specific tools and techniques that will improve the quality of buildings, create a safer and more reliable work environment, and improve the design and construction practice.

Learning Objectives

At the end of the this course, participants will be able to:

1) Learn how an owner applied Lean Methods and Practices to redesign healthcare operations within a facility and improve the delivery of patient care with improved work flow and facility operations and overall improve the patient experience.

2) Examine Case Studies from multiple projects in California, Illinois, and North Carolina and learn how incorporating 5s, increased levels of technologies including BIM, and other Lean Process Improvements has improved the schedule, quality, and communication on those projects.

3) Discover how incorporating Takt Planning and Daily Huddles in your Project can improve reliability with Construction Delivery.

4) Learn how incorporating pull planning techniques and the Last Planner System into the delivery of your project in design and construction will help facilitate communication between building system participants, help deliver your project on time, and create a safer construction site.

PRESENTATION FOR:

The facebook Journey

LCI Congress | Arlington, VA | October 11, 2012



Presented by: Sam Holt and Chris Dierks





IN THE MIDDLE OF “NOWHERE USA” NEED TO QUICKLY DEVELOP TRUST



PROJECT FACTS

- \$360 MM
- {2} 370,000 SF Buildings
- Schedule
 - Building One – 11 months
 - Building Two – 9 months
- Each Building has {4} 10MW Data Halls
- LEED Gold
- Implemented Various Lean Concepts
- Utilized ourPlan Collaborative Software

HOW DID WE START IMPLEMENTATION

- Education is Key
 - “New is Bad” Mentality
- A Week of Implementation Sessions
- Learning in Action – Get Going
- DPR Planning Boards

PLANNING BOARDS



FOUR TYPES OF MEETINGS

FOR PLANNING PRODUCTION



Pull Planning Sessions

PULL PLANNING





One on One Discussions

ONE ON ONE DISCUSSION



TIME TO MOVE ON TO OUR PLAN



View

List

Gantt

Calendar

Building

Timeframe

Look Ahead

This Week

Today

Custom

1/24/12 2/6/12

« Back

Forward »

Filters

GO

My Plan

Team

Company

Person

DAYS

FIT TO SCREEN

SHOW

1/24 Tu

1/25 Wednesday

1/26 Thursday

1/27 Friday

1/30 Monday

Baseboard

44

Area C;
23 hours

DPR Construction

Deliver...

9

Area A;
2 days

DPR Construction

Touch...

43

1 day 23 hours (+1 day)

DPR Construction

Finish...

11

Area A;
0 hours (+3 days)

DPR Construction

Open

Committed

Completed

Incomplete

Task

Milestone

Delivery

Roadblock

					DAYS	WEEKS	MONTHS	YEARS	FIT TO SCREEN	SHOW ▼	ACTIONS ▼	PRINT	EXPORT ▼			
					7/9	7/10	7/11	7/12	7/13	7/16	7/17	7/18	7/19	7/20	7/23	
☐	ID	Label	Status	Finish	Company	M	Tu	W	Th	F	M	Tu	W	Th	F	M
☐	69609	Trim-Out	➡ Committed	7/11 W	Rosendin Elect...											
☐	69610	Install Lights	➡ Committed	7/23 M	Rosendin Elect...											
☐	71253	Install Grid and...	➡ Committed	7/11 W	DPR Constructi...											
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☐	82363	Refrigerant Pip...	➡ Committed	7/11 W	McKenney's, Inc.											
☐	82371	Water Treatme...	➡ Committed	7/18 W	McKenney's, Inc.											
☐	82372	IDF Room Refri...	➡ Committed	7/11 W	McKenney's, Inc.											
☐	82373	Elevator Equip...	➡ Committed	7/18 W	McKenney's, Inc.											
☐	82374	Flush and Fill...	➡ Committed	7/16 M	McKenney's, Inc.											
☐	85966	Refrigerant Pl...	❌ Incomplete	7/13 F	McKenney's, Inc.											
☐	86066	install ACT#1 c...	➡ Committed	7/19 Th	DPR Constructi...											
☐	86070	drop tile ACT #4	➡ Committed	7/19 Th	DPR Constructi...											
☐	86080	Drop tile ACT#...	➡ Committed	7/13 F	DPR Constructi...											
☐	87540	F/A - Fire Alar...	➡ Committed	7/10 Tu	Preferred Elect...											
☐	87544	BMS - Run con...	➡ Committed	7/10 Tu	Preferred Elect...											
☐	88083	Grounding Cab...	➡ Committed	7/27 F	Rosendin Elect...											
☐	88084	Install Access...	➡ Committed	7/10 Tu	DPR Constructi...											



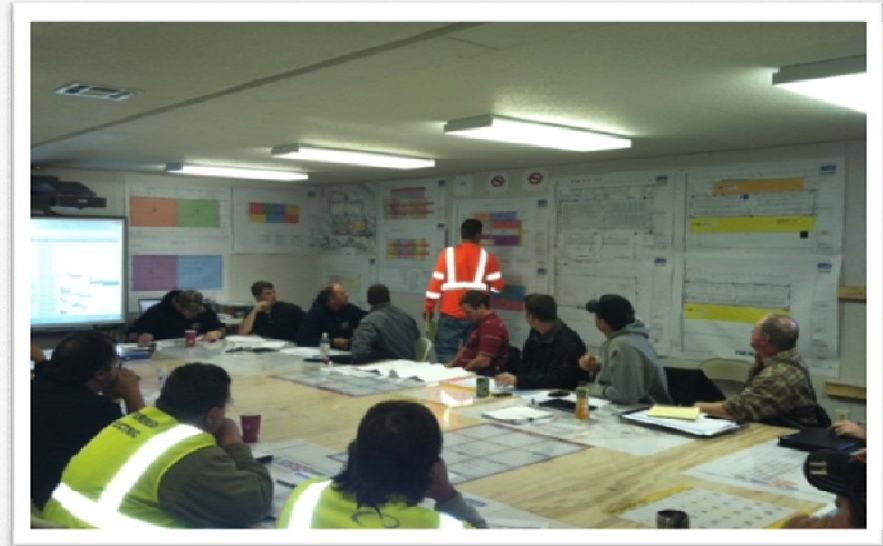
Weekly Trade Meeting

WEEKLY MEETING WITH TRADES



Stand and deliver of activities

Coordinate activities and clarify sequence of work



LOTS OF VISUAL TOOLS





Daily Stand-Up

DAILY STAND-UP



SUCCESS STORY

PEER PRESSURE IS GOOD



LESSONS LEARNED

- There is no one way for implementation, education is essential
- Utilize the people who “GET IT” to influence others
- Know what you want out of a meeting

This concludes The American Institute of Architects
Continuing Education Systems Course

Lean Construction Institute



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