Prefabrication
Providing Value from a Builders Perspective

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A prefabrication strategy allows for the practice of lean concepts, while delivering a successful project. Various projects types fit the mold for prefabrication, including hospitals, institutions, hotels, and industrial facilities. All of these types of projects have something in common; highly-repetitive building components and systems. By incorporating a prefabrication strategy, a number of benefits are achievable. This presentation will focus on a recently completed Healthcare project in which prefabrication was used and highlight how this strategy helped to reduce material handling, minimize construction waste, reduce delivery impacts to a congested site, improve the construction schedule, improve the quality of work, and reduce safety incidents.
Learning Objectives

- Engage the design team, subcontractors, and owner to plan for prefabrication in the design phase
- Recognize opportunities to implement a prefabrication strategy in different project delivery methods
- Understand how BIM plays an important role in early decision making, collaboration, and coordination of multiple trades
- Understand the potential cost savings and productivity increase when implementing this approach
Improving the delivery process

- Streamlining traditional tasks and workflows
  - Enhance productivity
  - Improve project schedule
  - Reduce waste
  - Reduce cost
  - Control the quality of work
  - Minimize safety incidents

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Case Study

Good Samaritan Regional Health Center
Mount Vernon, IL
Good Samaritan Regional Health Center

- Designed by BSA Life Structures
- Broke ground in April 2010
- 382,000-sq. ft. full service hospital
- 134 Patient Restrooms
- 134 Patient Headwalls

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Why Prefabrication?

- CM at Risk delivery method
- McCarthy proposed strategy to the client
- GMP shared savings
- Subcontractors familiarity
- Focus on simplicity
  - Assess
  - Build
  - Transport
  - Install

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Assess

- Design Intent
  - Maintain integrity of Building envelope
  - Floor to Floor walls

- Eliminating added cost for re-design

- Showing ROI

- Buy-in from team members
Assess

- Collaboration with Design team
- Finalized strategy
- Subcontractor buyout and buy-in
- Logistics
Build

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Transport
Install
Prefab Video
ROI

- Pre-Fabrication breakdown
  - Bathroom install ~ Avg. 25 min
  - Headwall install ~ Avg. 10 min
  - Schedule savings ~ 9 Weeks
  - Material savings ~ Accurate material orders
  - Overall Cost Savings ~ $350,000
  - Reduced Waste
  - Improved Safety
  - Improved Quality
Thank You!

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