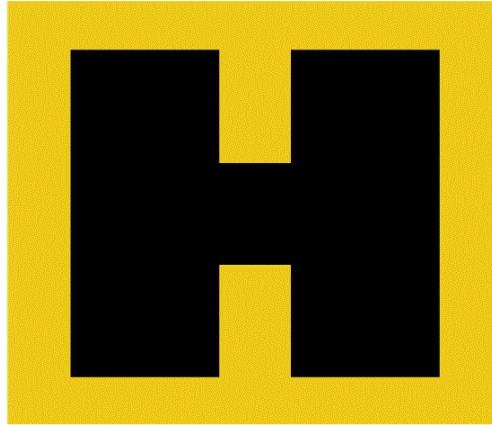


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Lean Works

TM



**Herrero**  
Contractors, Inc.

Mark Herrero, CEO

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## Quick Introduction to Herrero Contractors, Inc.

- Philosophy, culture . . .our view
  - Our journey; how we are changing
  - What does Lean mean at Herrero?
-

- 
- PHILOSOPHY
    - 5 Big Ideas (Collaborate, Networks of Commitments, Relatedness, Optimize the whole, Learning)
    - 4 P's (Philosophy, Process, People, Problem Solving)
  
  - CULTURE
    - Seek & Make Reliable Commitments
    - Continuous Improvement
    - Leadership
    - Foresight
    - Planning
  
  - MISSION
    - Identify and Deliver Customer Value
  
  - VISION
    - Culture + Process = Accountability and Value
  
  - STRATEGY
    - Focus on process
    - Policy deployment (Hoshin Kanri)
-

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# Herrero Contractors, Inc.'s Commitment to Lean

## (Building Culture)

- Sutter Health orientation to Lean and Lean Construction Congress
  - Whole Company orientation to Lean
  - Pilot projects experimenting with Lean Project Delivery
  - Formed Lean Development Group
  - Training in seeking and making Reliable Promises
  - As a group, we read the Toyota Way
  - June 1, 2005 declared all new Herrero Projects will use Lean Project Delivery
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# Herrero Contractors, Inc.'s Commitment to Lean

- Taking Lean project delivery to other Owners as our preferred project approach (Building Culture)
  - Operate Herrero Contractors, Inc. as a Lean Enterprise
  - Georgetown Toyota Plant Visit
  - Fremont NUMMI Plant Visit
  - Whole Company orientation for new people
  - Lots of learning, with Sutter FPD, LPC, P2SL, Lean Coordinators, industry conferences, small study groups, and many others
  - Never discouraged or reprimanded
-

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# Lean at Herrero

(Building Process)

**At Herrero Contractors, we define a project as Lean when it has, at minimum, the following characteristics:**

- We train the team to seek and make Reliable Promises, and we train the team to understand the Promising Circle, to then run the project as a Network of Commitments.
  - We use Pull Scheduling and the Last Planner System to produce what the customer wants and to improve planning.
  - We use Target Value Design/Target Costing to control cost.
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# Lean at Herrero

(Building Process)

- We practice project Kaizen to continually improve.
  - We implement 5S as one way to eliminate waste.
  - We develop hand off processes between activities to clearly define Conditions of Satisfaction, to prevent defective work from being passed down stream, and to allow workers to “pull the Andon cord” to stop the work if needed to provide Quality Assurance.
  - Peek ahead:
    - 1) Self assemble Teams
    - 2) Integrated form of agreement
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# Lean at Herrero

Key to our success is to create a corporate culture as a Lean Enterprise which values the 4 P's of philosophy, process, people, and problem solving and which values continual learning and improvement. We intend to add process to culture and thereby get accountability and deliver real customer value.

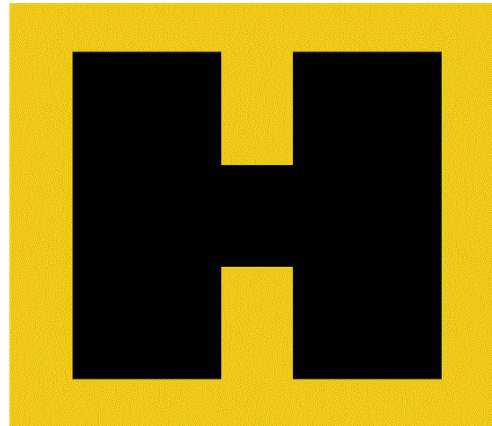
**Culture + process = accountability and real customer value**

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Lean Works

TM



**Herrero**  
Contractors, Inc.

Tom Guardino, Superintendent

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Why am I here?

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## Current Project

# Davies Medical Center

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- MRI suite
  - 4 Phase Kitchen Project including refrigerator boxes and cooking equipment
  - 2 Radiology Rooms with state of the art x-ray equipment
  - Interventional Radiology Suite
  - Physical Therapy / Terrain Park
  - NPC 3 Upgrades of existing ceiling and utilities which includes all critical areas of the main hospital.
-

- 
- 2 full patient floors: demolition & remodel
  - Build 6 new restrooms to meet ADA Compliance
  - Replacement of existing HVAC equipment on the roof of the Main Hospital
  - Main Hospital Roof Replacement
  - Construction of New 4 story MOB in existing Parking Lot
  - Construction of Pedestrian Bridge from New MOB to existing hospital
  - Remodel of Sterile Supply area
-

- 
- Addition of 2 new Operating Rooms
  - New Clinical Lab area
  - Expansion of existing PACU
  - 9 phase remodel of existing Emergency Department
  - Relocation of Nuclear Med
  - Refurbish Out Patient Pool and Gym
  - 7 Make Ready projects
-

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Do you think I  
will need  
the whole team  
to pull it off,  
or just part?

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# Current Project Management Staff:

- 4 Superintendents
  - 6 Architects from 2 different Firms
  - 4 HCI Project Managers
  - 4 Sutter Health Owner Reps
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# Added Complexities.....

- Existing Fireproofing
  - OSHPD
  - IOR
  - Specialty Inspectors
-

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Do you think I  
will need  
the whole team  
to pull it off,  
or just part?

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# I need everybody!

- Design Team
  - Owner Reps
  - Hospital Engineering
  - Subcontractors
  - IORs
  - Mechanical, Structural, Electrical Engineers
  - Laborers
  - Carpenters
  - HVAC installers
  - Electricians
  - Plumbers
  - Project Engineers
  - Project Coordinators
  - Project Managers
  - OSHPD
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# Sutter Health's Challenge to the Construction Industry

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# Projects Complete as of Today

- MRI
  - Respiratory Therapy area
  - Endoscopy Suite
  - 4 Phase Kitchen Project
  - Seismic upgrade on 4 Operating Rooms
  - 1 Radiology Room
  - Built 4 new restrooms to meet ADA compliance
  - Kitchen Ceiling Encapsulation project
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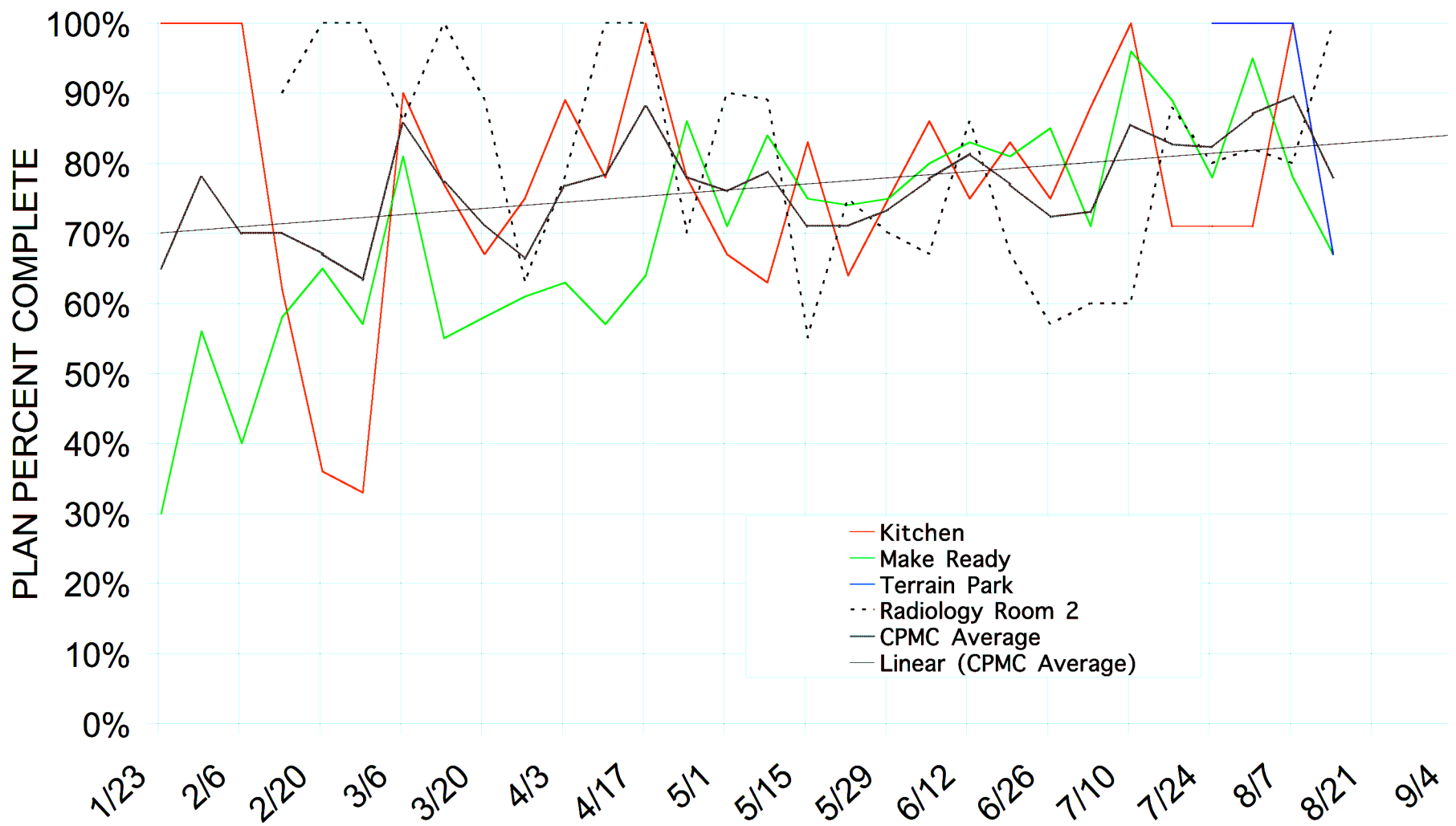
How do we go about  
changing the  
Traditional Processes?

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# A few examples of Herrero's implementation for improving processes are:

- Jobsite Orientation
  - Grouping Activities
  - No RFI's
  - Common Work Area
  - Pull Scheduling
  - Long Term Relationships
  - Celebrating Success
  - Last Planner System
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# Challenges of our implementation process

- Implementing Last Planner System
  - Engaging reluctant parties
  - Shielding Last Planners from non-participants, comments, and forced recommendations
  - Creating predictable work flow
-

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# Lean Works <sup>TM</sup>

- In the Construction Industry
  - Messer, Turner, Herrero **Lean Works** <sup>TM</sup>
  - Works even in the most complex projects
  - What it means to our project team
-

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# The BIG PICTURE

- Eliminate waste
  - Maximize the whole, not parts
  - Expose individuals / processes which do not add value
  - NOT to **BLAME** or **PUNISH** but to **LEARN** and **IMPROVE**
-