



2021 THE CONSTRUCTION ASSOCIATION CONVENTION



AGC

THE CONSTRUCTION
ASSOCIATION

Failure Isn't Fatal: Lean Lessons from Soaring Eagle Casino & Resort

Granger Construction, Lansing, MI

Tim VanAntwerp

Granger Construction

Mike O'Rourke

Granger Construction

Bill Curtice

Granger Construction

Luke Ewbank

Granger Construction

Tim VanAntwerp



Mike O'Rourke



Bill Curtice



Luke Ewbank



Earn CE hours for this Session

Participants must:

1. Sign in using attendance sheet in the back of the room
2. Attend at least 95% of the session
3. Complete the session and post-program evaluation

Additional instructions will be emailed to attendees requesting CE credits. If requesting AIA credits, please provide your AIA number so we can report your attendance. For questions regarding continuing education credits, please contact **Jo-Anne Torres**, Manager of Professional Development and Continuing Education, at jo-anne.torres@agc.org, or (703) 837-5360.



Earn CE hours for this Session



1 0 AIC CPD Credit | AGC of America has been approved to offer Continuing Professional Development (CPD) credits for qualifying programs by the [American Institute of Constructors](#) (AIC)



1 0 AIA Learning Unit (LU) | The Associated General Contractors of America is a registered provider of AIA-approved continuing education under Provider Number G523. All registered AIA CES Providers must comply with the AIA Standards for Continuing Education Programs.



AGC of America is registered with the National Association of State Boards of Accountancy (NASBA) as a sponsor of continuing professional education on the [National Registry of CPE Sponsors](#). This session is designated for **1 0 CPE credit** in the field of Production.



1 0 CM-Lean CE Credit | AGC of America recognizes the Annual Convention as qualifying for continuing education hours towards the renewal of AGC's Certificate of Management-Lean Construction (CM-Lean).



Failure Isn't Fatal: Lean Lessons from Soaring Eagle Casino & Resort

Learning Objectives

By the end of this session, participants will be able to:

1. Describe how a multi-phased project with strategic check points can uncover inefficiencies and improve quality, safety and customer experience as the project progresses
2. Explore how to develop a team culture that promotes open and honest communication, enables constructive feedback and allows teams to mine for waste and work more efficiently
3. Discover benefits of building trust and encouraging teams to uncover waste through Lessons Learned meetings
4. Discuss takeaways including resequencing, identifying bottlenecks and conducting cost/benefit analysis to improve project flow
5. Explore real life examples of the lessons learned on the Soaring Eagle Guestroom Renovations project



Failure Isn't Fatal: Lean Lessons from the Soaring Eagle Casino & Resort



Project Overview



Failure Isn't Fatal: Lean Lessons from Soaring Eagle Casino & Resort

Our Mission...





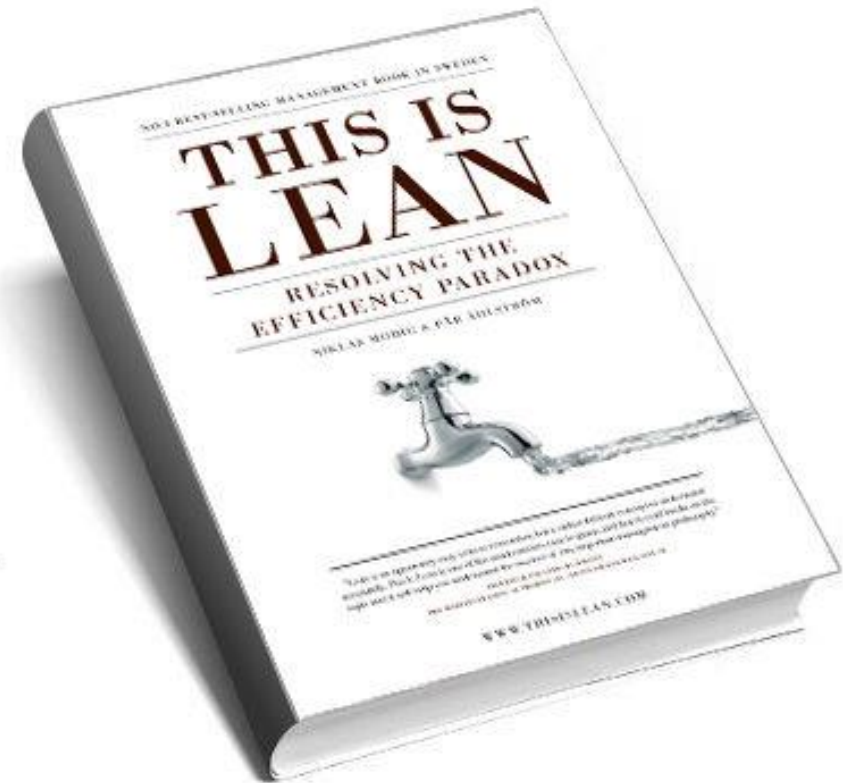
Cool stats to impress you...

- 516 guest rooms....renovated...while occupied
- \$75 million...construction cost
- 115,000 total lost room nights...expected
- Over \$10 million in lost room revenue...expected

Their Community, Their Vision...



A 5-year Lean Journey...



A 5-year Lean Journey...Meets Opportunity





Planning for Adaptation



It's **easy** to say

*“we’re going to
get better every day,”*

BUT WITHOUT

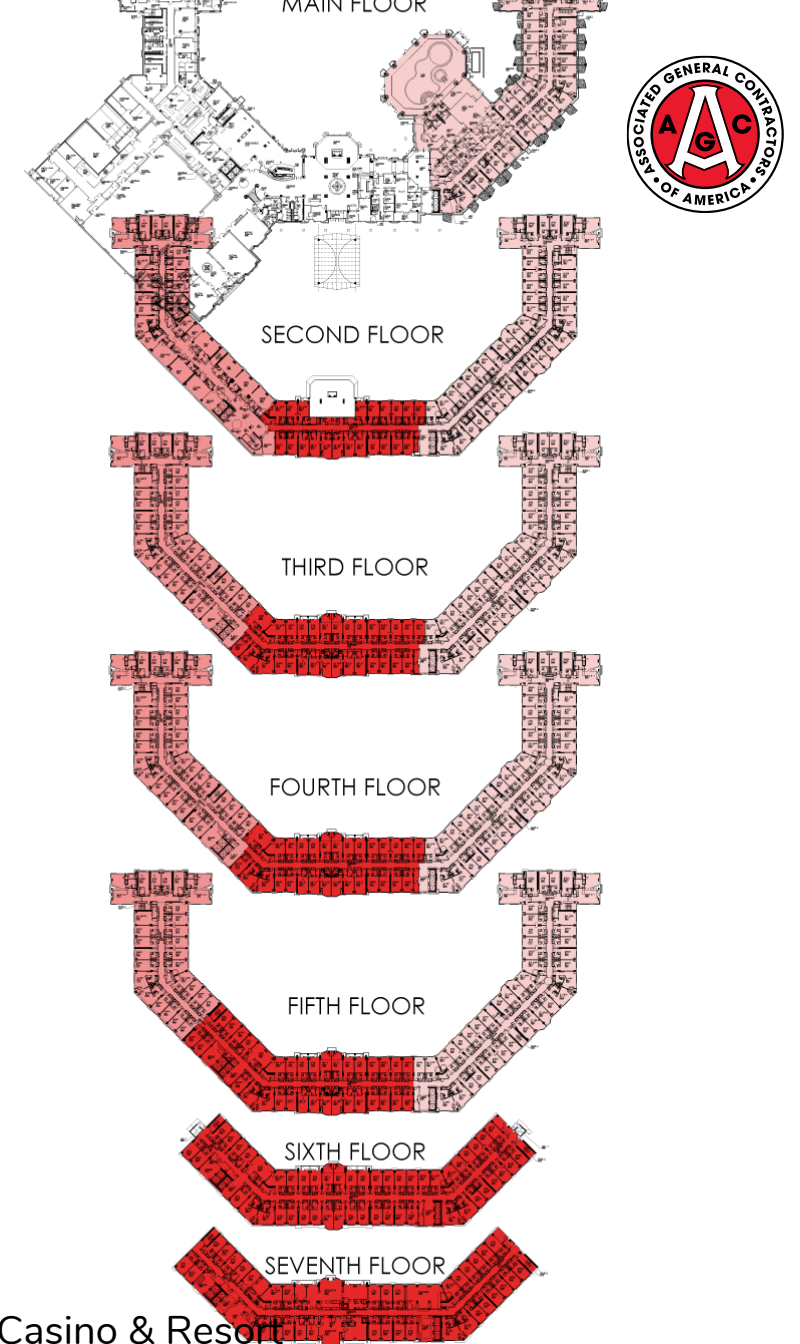
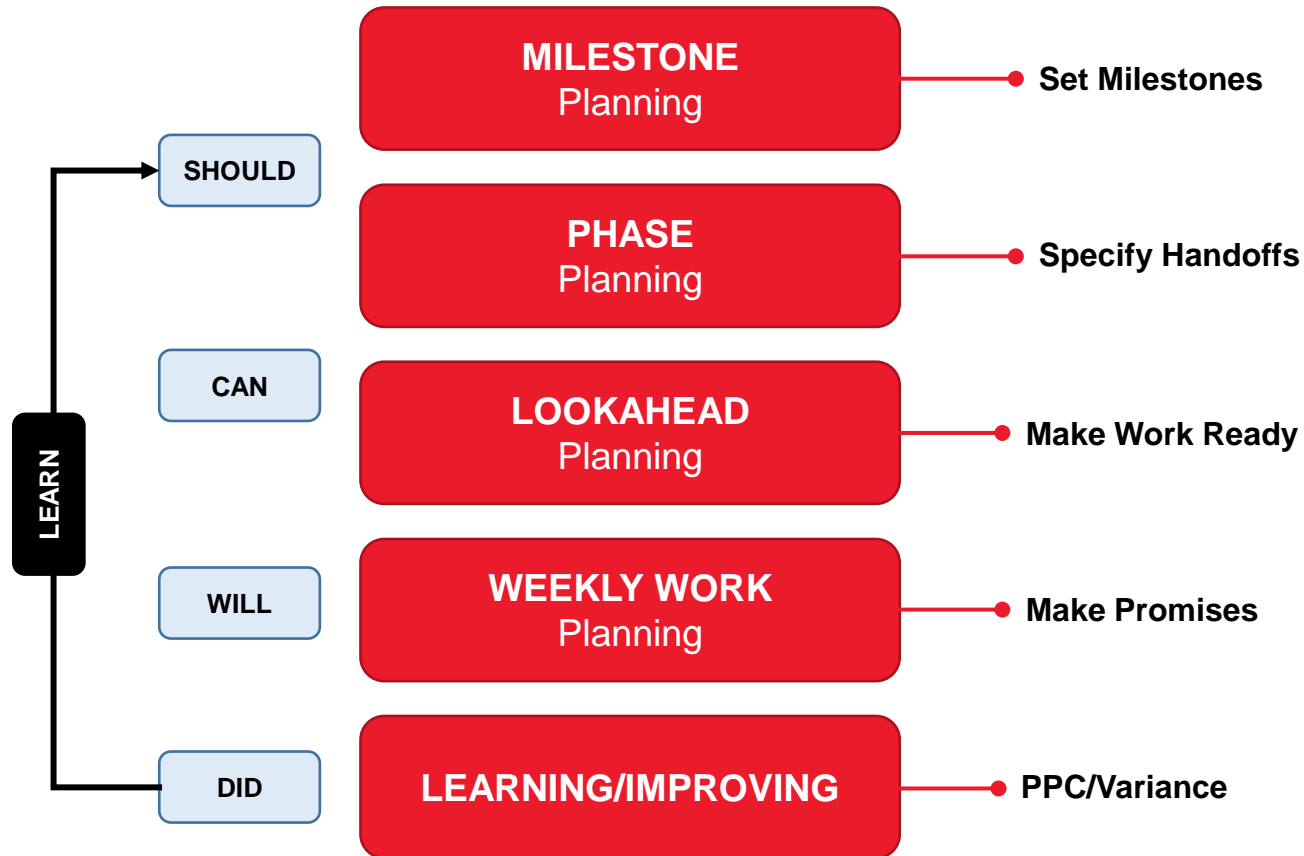
a sense of humility, **HONESTY**

and a **plan,**

those are ***just words.***

Designing a Plan to Adapt

PHASING





Designing a Plan to Adapt

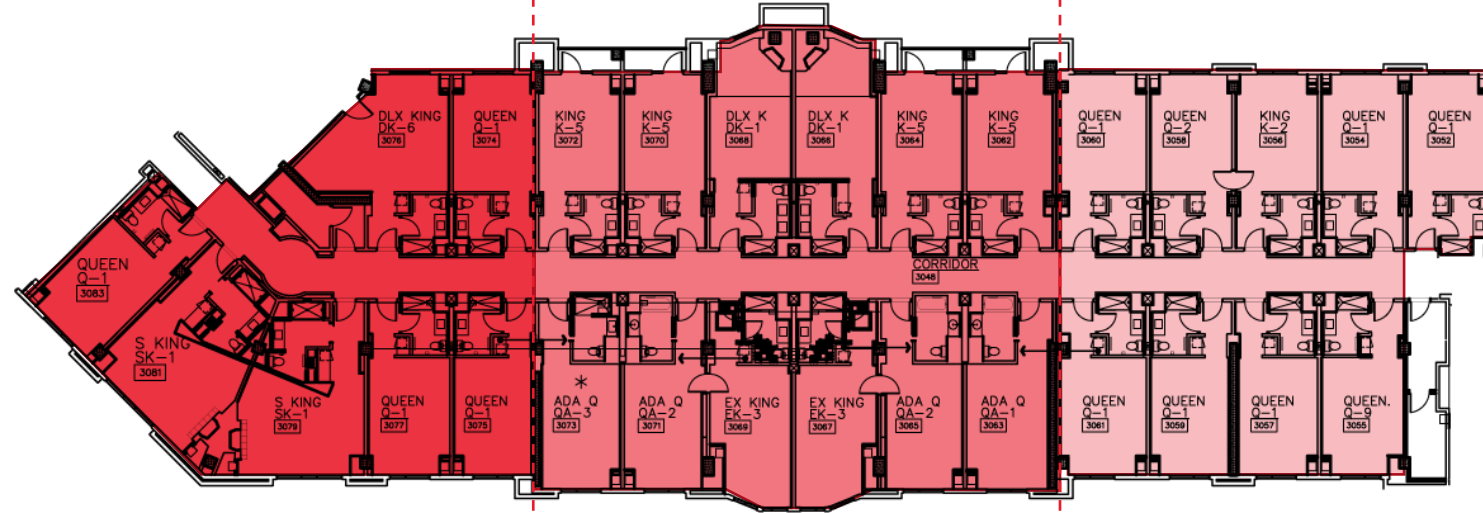
SEQUENCING

PHASE 1

SEQ. 1

SEQ. 2

SEQ. 3



THIRD FLOOR

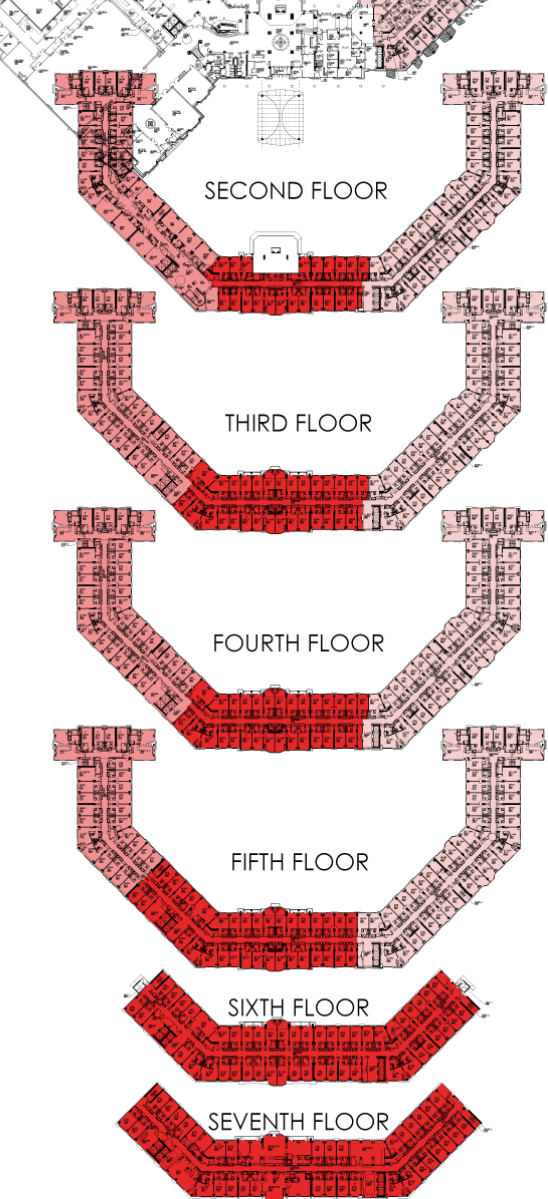
28 ROOMS

16 QUEEN ROOMS

- 10 TYPE Q-1
- 1 TYPE Q-2
- 1 TYPE QA-1
- 2 TYPE QA-2
- 1 TYPE QA-3
- 1 TYPE Q-9

12 KING ROOMS

- 2 TYPE EK-3
- 2 TYPE SK-1
- 1 TYPE DK-6
- 4 TYPE K-5
- 2 TYPE DK-1
- 1 TYPE K*2





Designing a Plan to Adapt BATCHES



28 ROOMS

16 QUEEN ROOMS

- 10 TYPE Q-1
- 1 TYPE Q-2
- 1 TYPE QA-1
- 2 TYPE QA-2
- 1 TYPE QA-3
- 1 TYPE Q-9

12 KING ROOMS

- 2 TYPE EK-3
- 2 TYPE SK-1
- 1 TYPE DK-6
- 4 TYPE K-5
- 2 TYPE DK-1
- 1 TYPE K*2



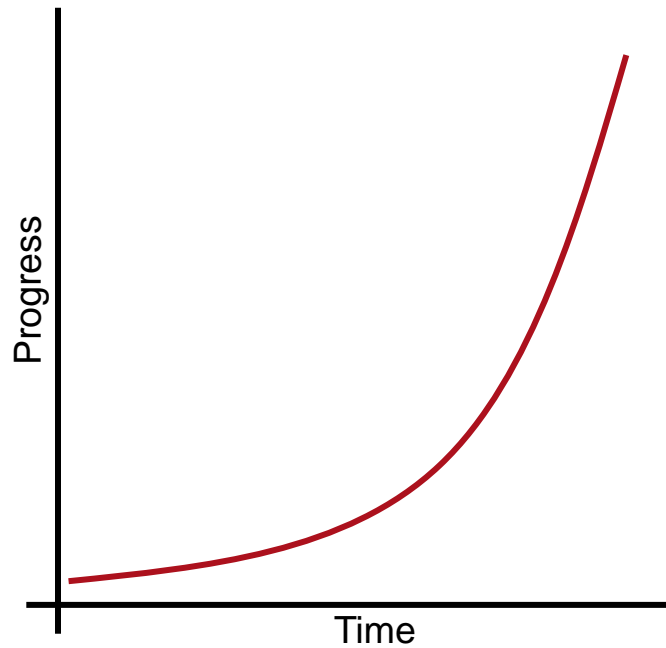
Why take this approach?



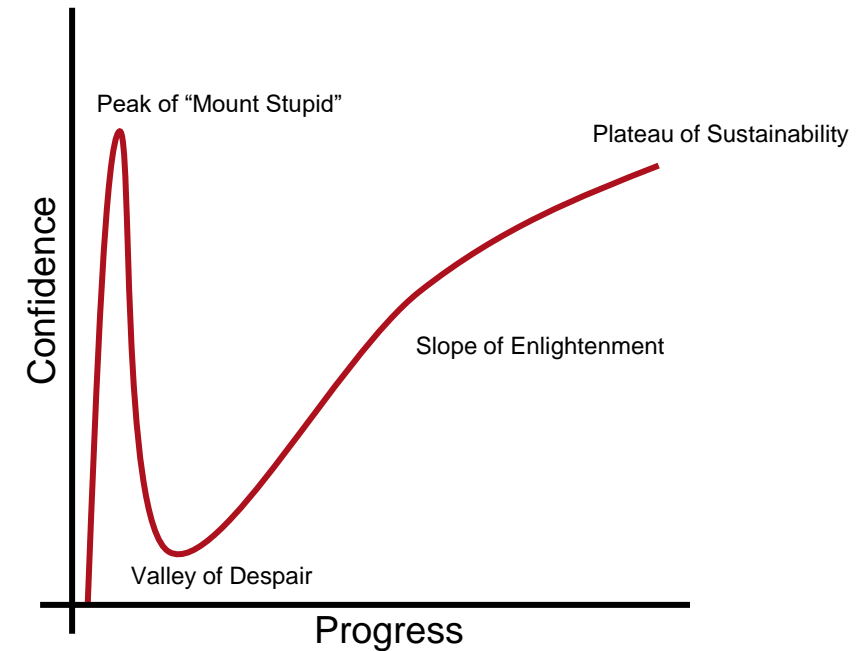
Failure Isn't Fatal: Lean Lessons from Soaring Eagle Casino & Resort

Continuous Improvement

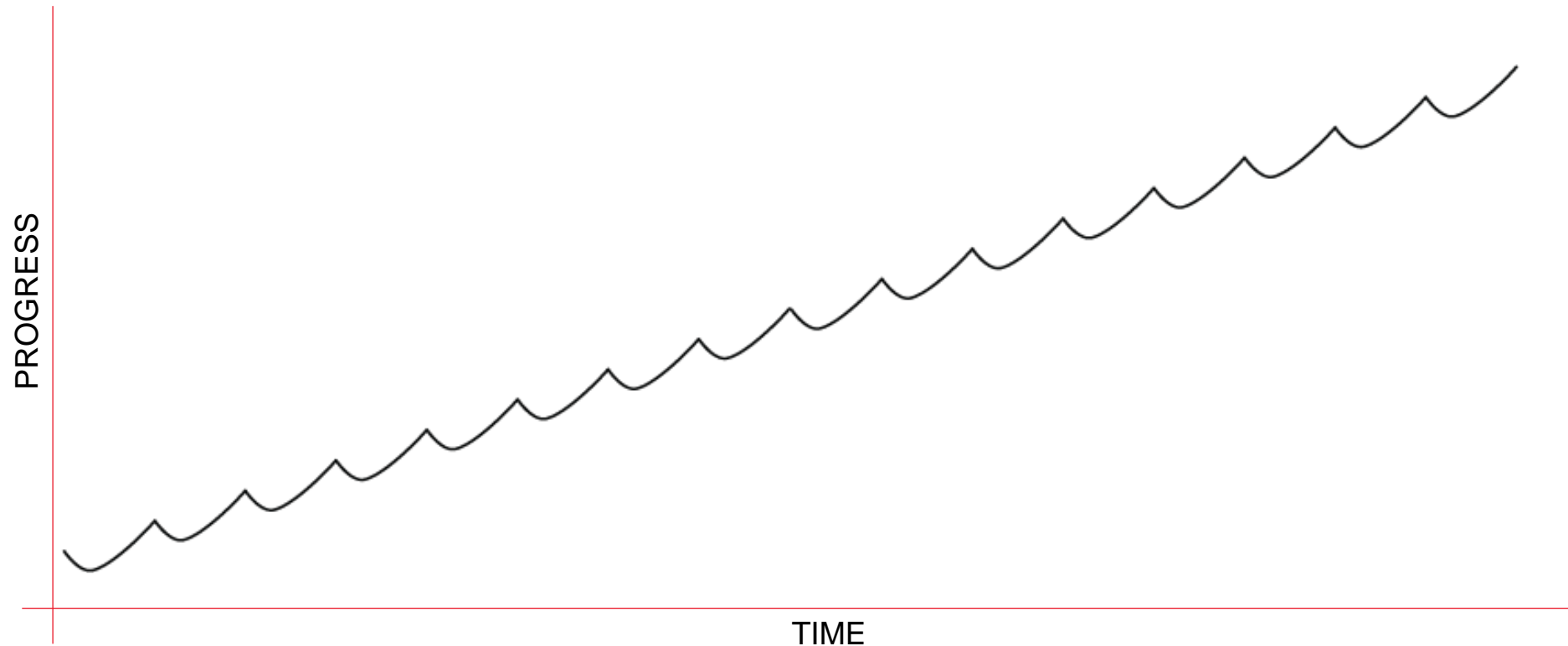
Expectations of Progress



Realities of Progress



The Concept of “Little Js”





**1% BETTER
EVERY DAY**



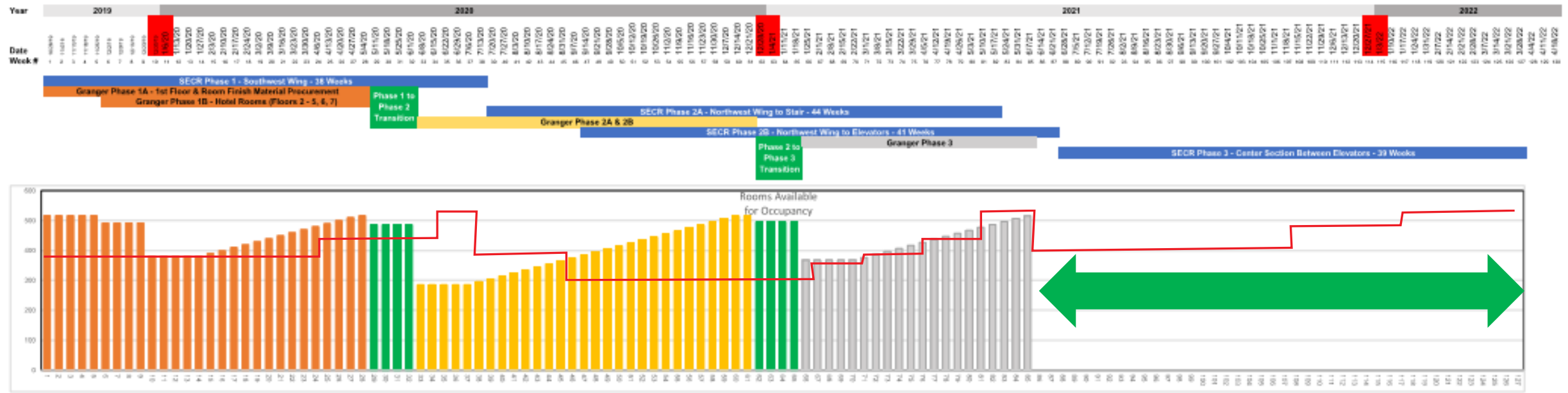
Failure Isn't Fatal: Lean Lessons from Soaring Eagle Casino & Resort



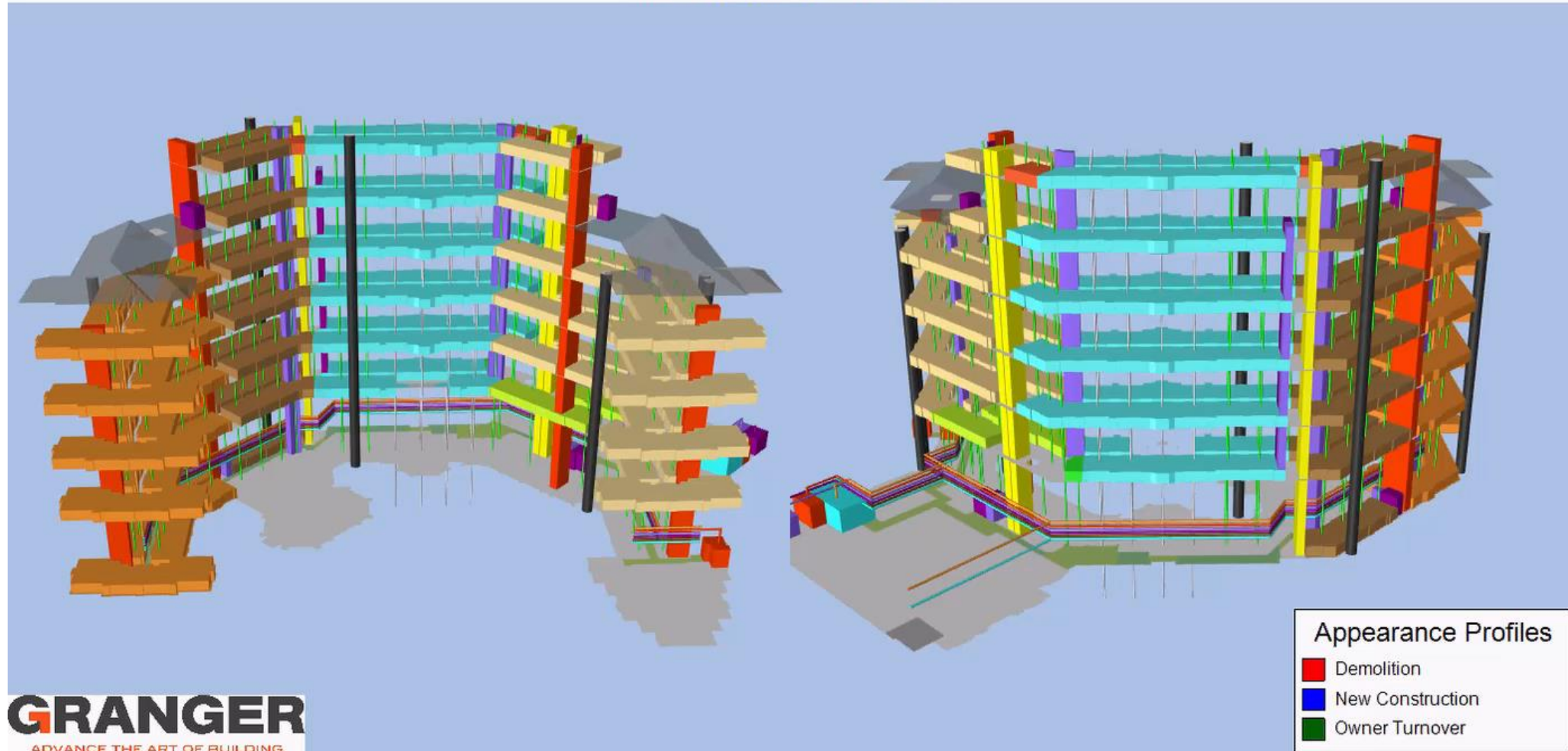
Implementation & Management of Continuous Improvement Mindset



Soaring Eagle Casino & Resort
Preliminary Schedule For Rooms Available During Construction



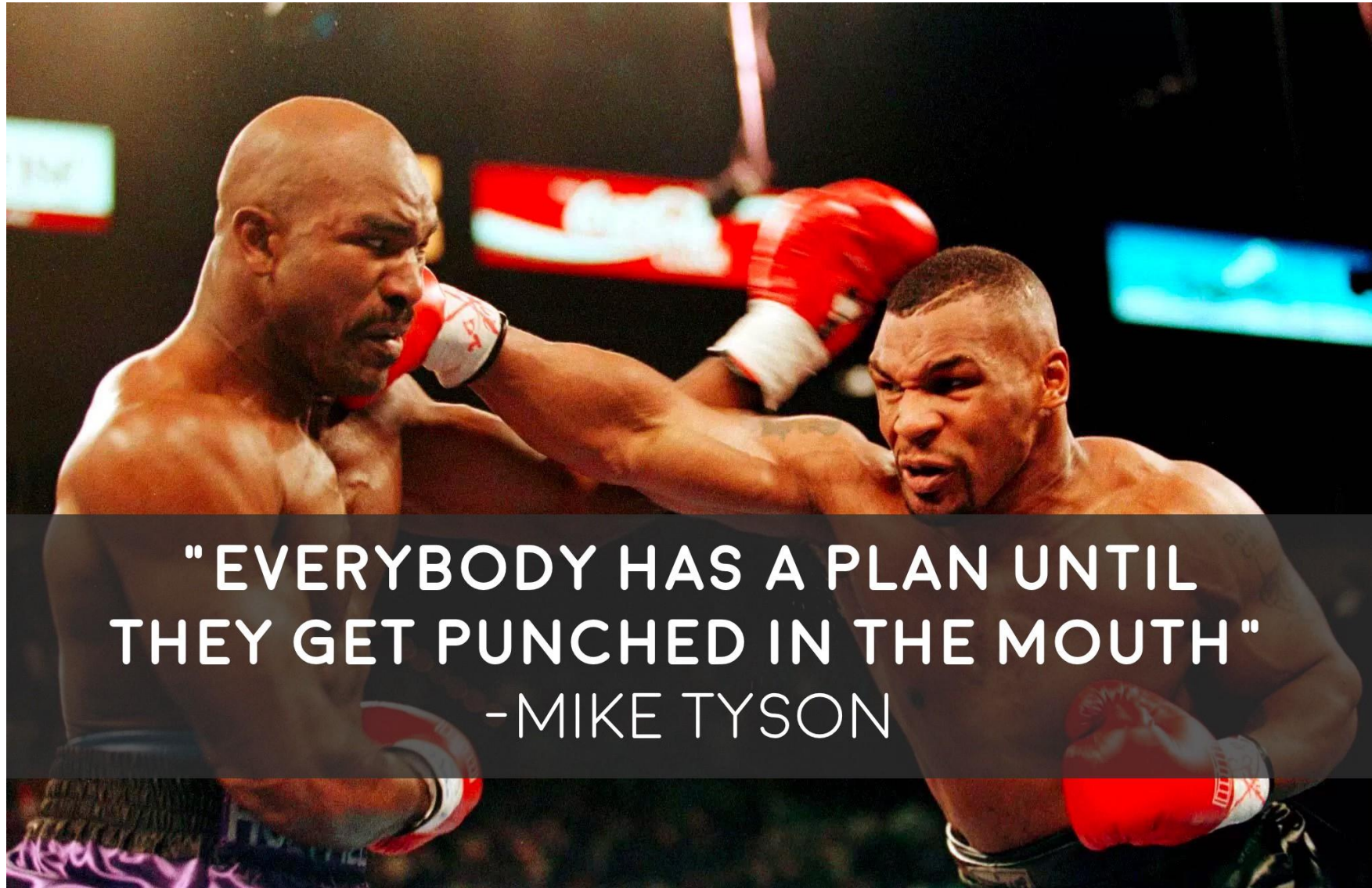
HOTEL ROOM PHASING PLAN





SOARING EAGLE CASINO & RESORT-HOTEL GUEST-ROOM RENOVATION PROJECT LEVEL 3 - PHASE 1A BATCH





"EVERYBODY HAS A PLAN UNTIL
THEY GET PUNCHED IN THE MOUTH"
-MIKE TYSON



The 7 Habits

Be Proactive

Begin With the End in Mind

Put First Things First

Think Win-Win

Seek First to Understand

Then to Be Understood

Synergize

Sharpen the Saw



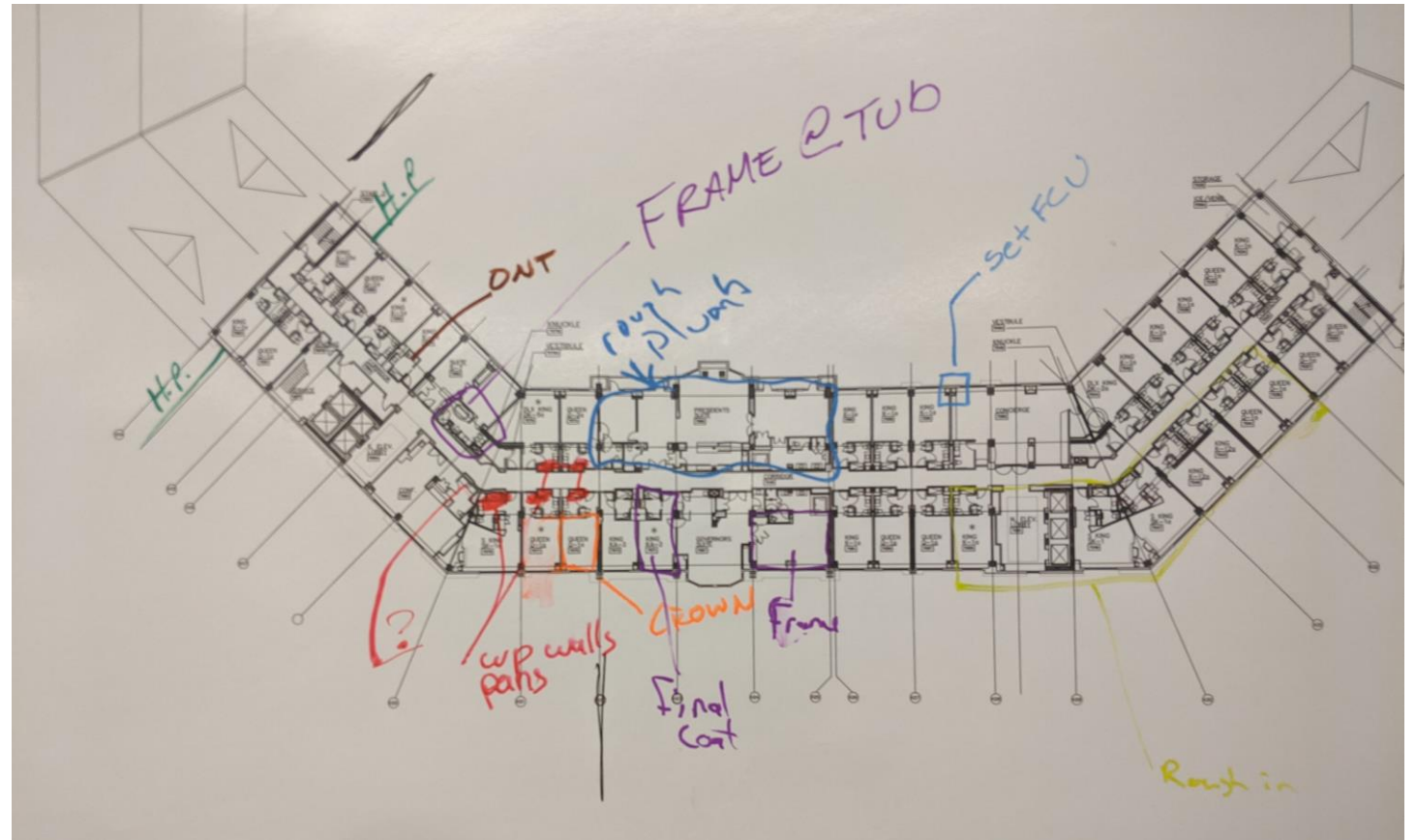
Managing the Plan



Failure Isn't Fatal: Lean Lessons from Soaring Eagle Casino & Resort

Morning Huddles

- Daily coordination
- Daily commitments
- Identifying/resolving constraints



Afternoon Check Ins

- Promises made. Promises kept?
- Why or why not?
- Planning for tomorrow





PREMIUM SUITE

1006

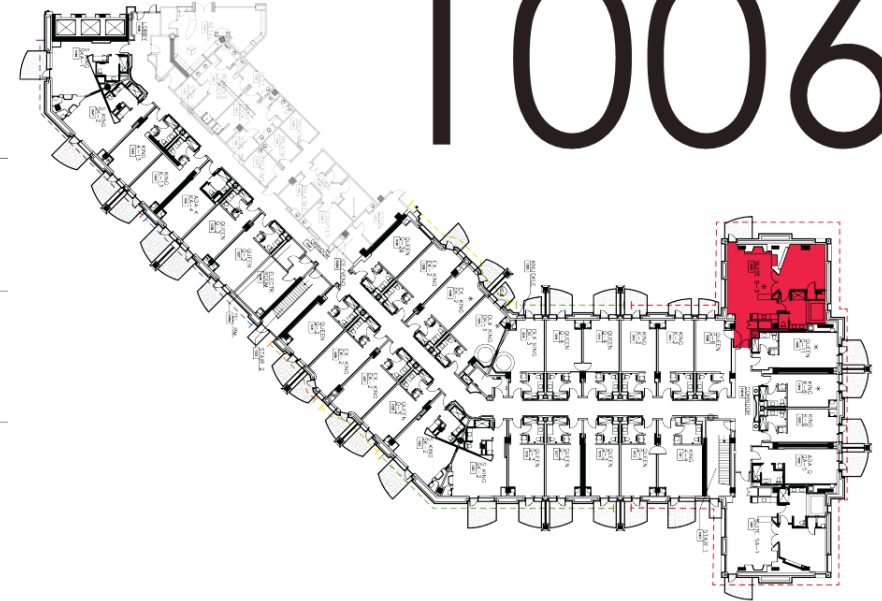
ROOM
ROOM TYPE: **S-3**
HAND (R/L): **L**
REF. DWG: **A-262**
ROOM

BATH
BATH TYPE: **B-13**
BATH REF. DWG: **A-289**
BATH

FINISH
RM. FINISH GROUP: **B**
FINISH SERIES: **200**
FINISH

HARC

GRANGER
ADVANCE THE ART OF BUILDING



“Small J”



“Begin with the End in Mind”



“Put First Things First”

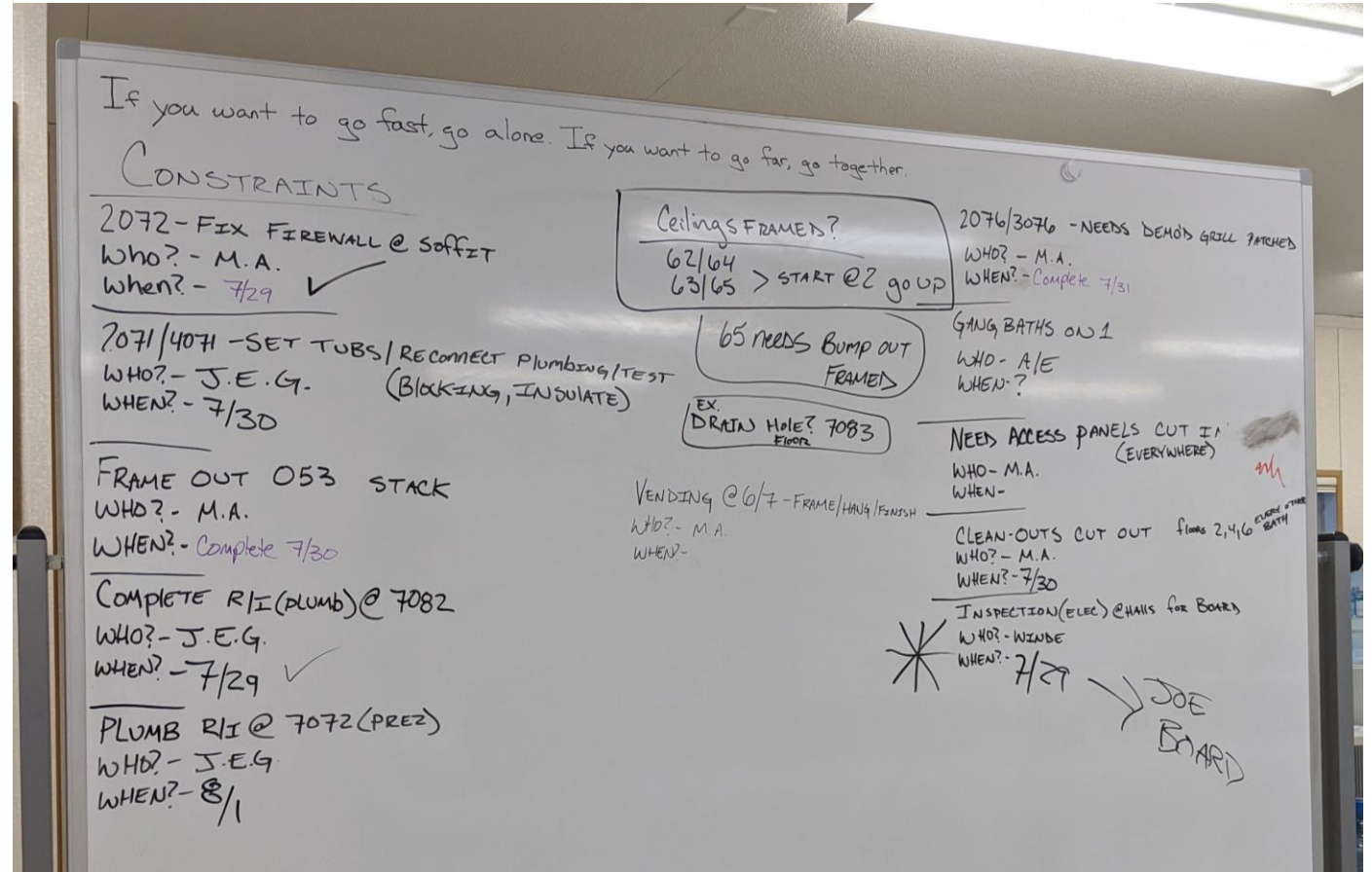


“Think Win-Win”



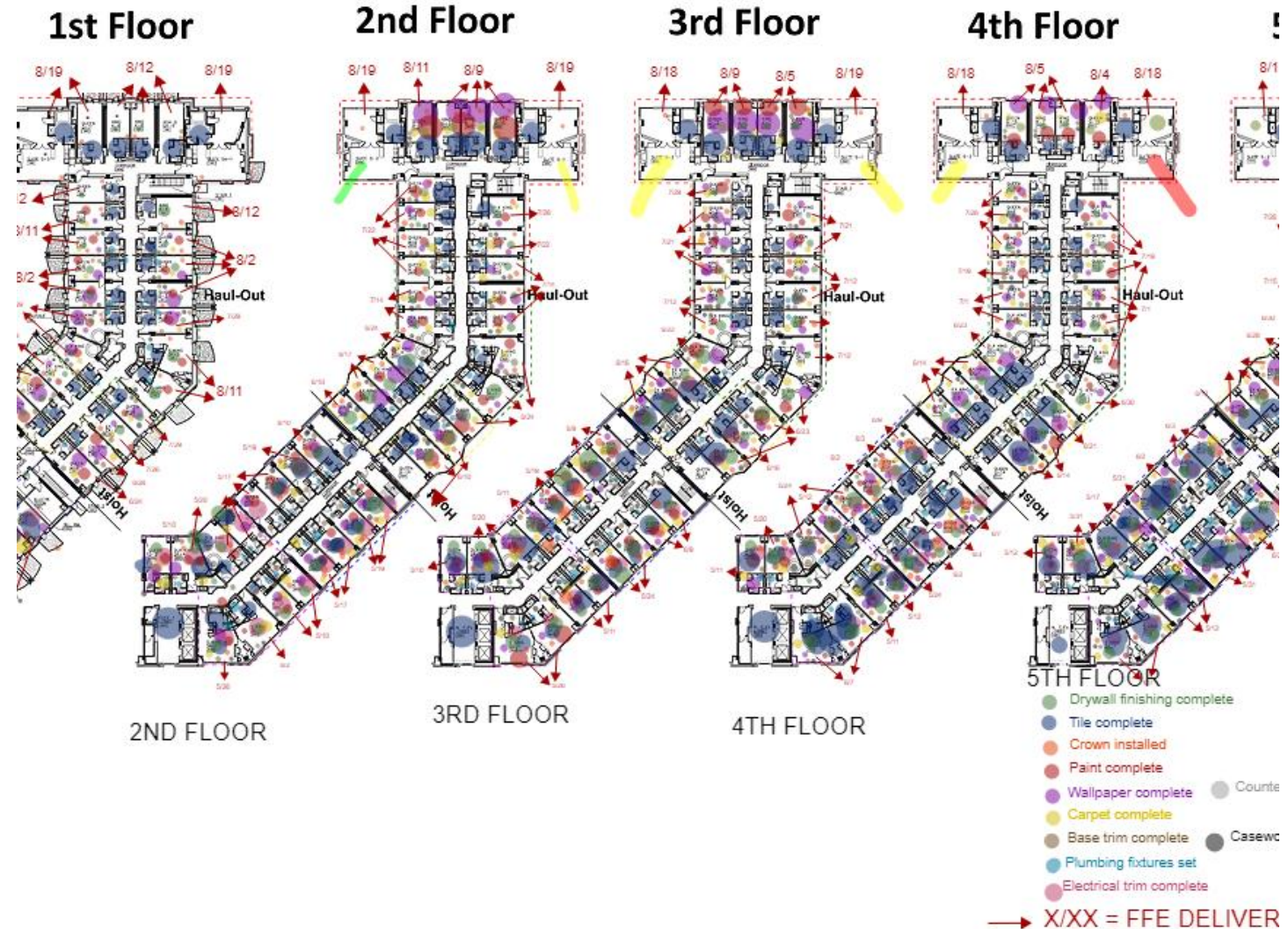


“Seek first to understand, then to be understood”

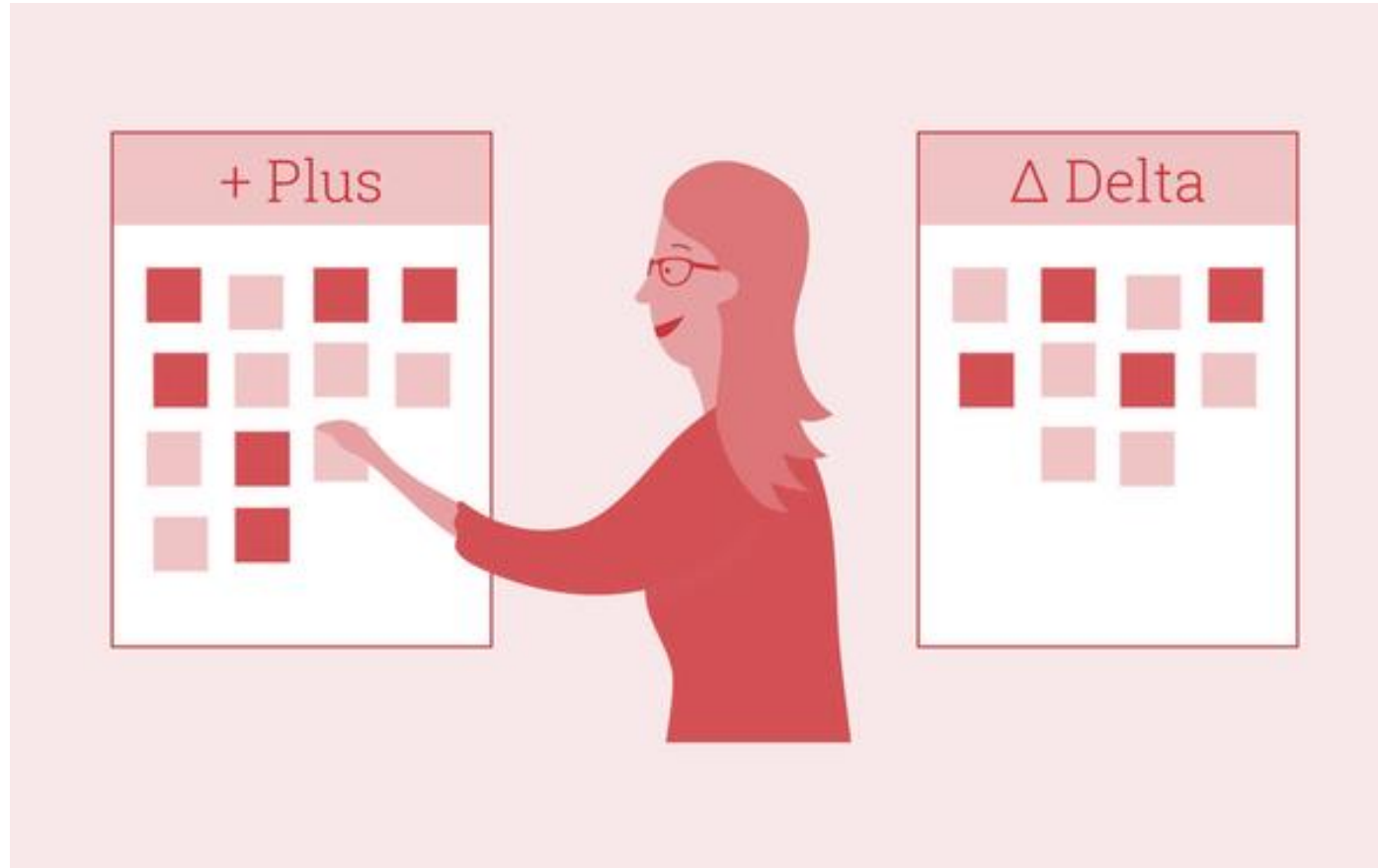


“Synergize”

“Sharpen the Saw”



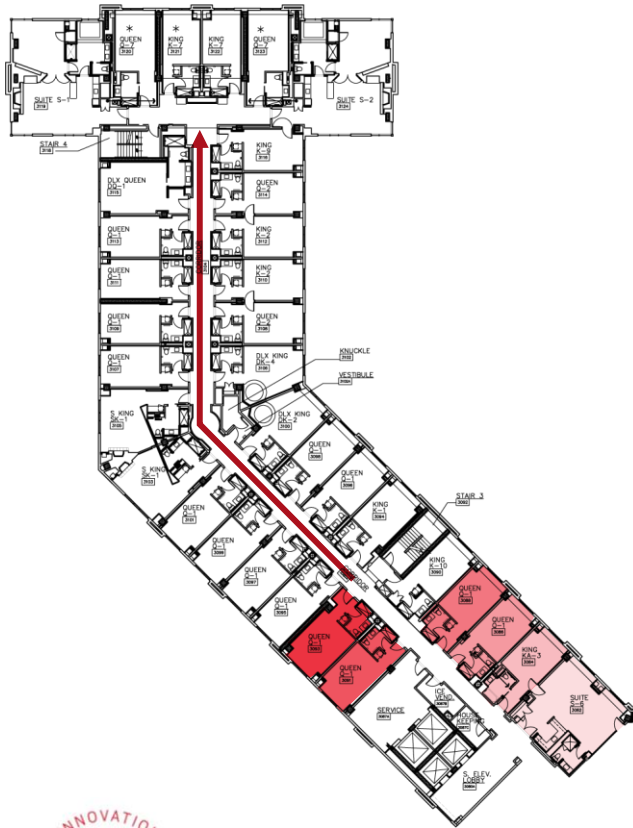
Lessons Learned Meetings



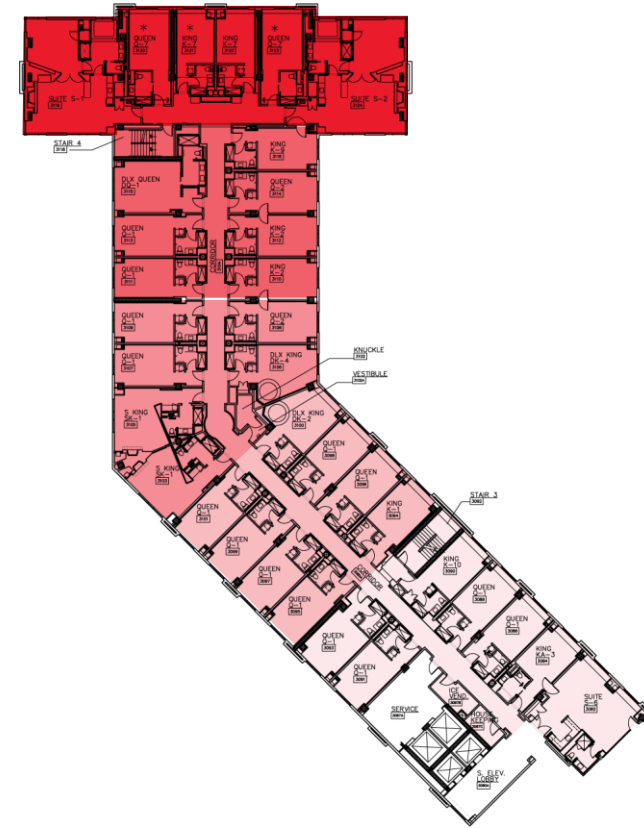
Batch Modifications to Improve Flow



INITIAL BATCH PLAN
(BY ROOM)

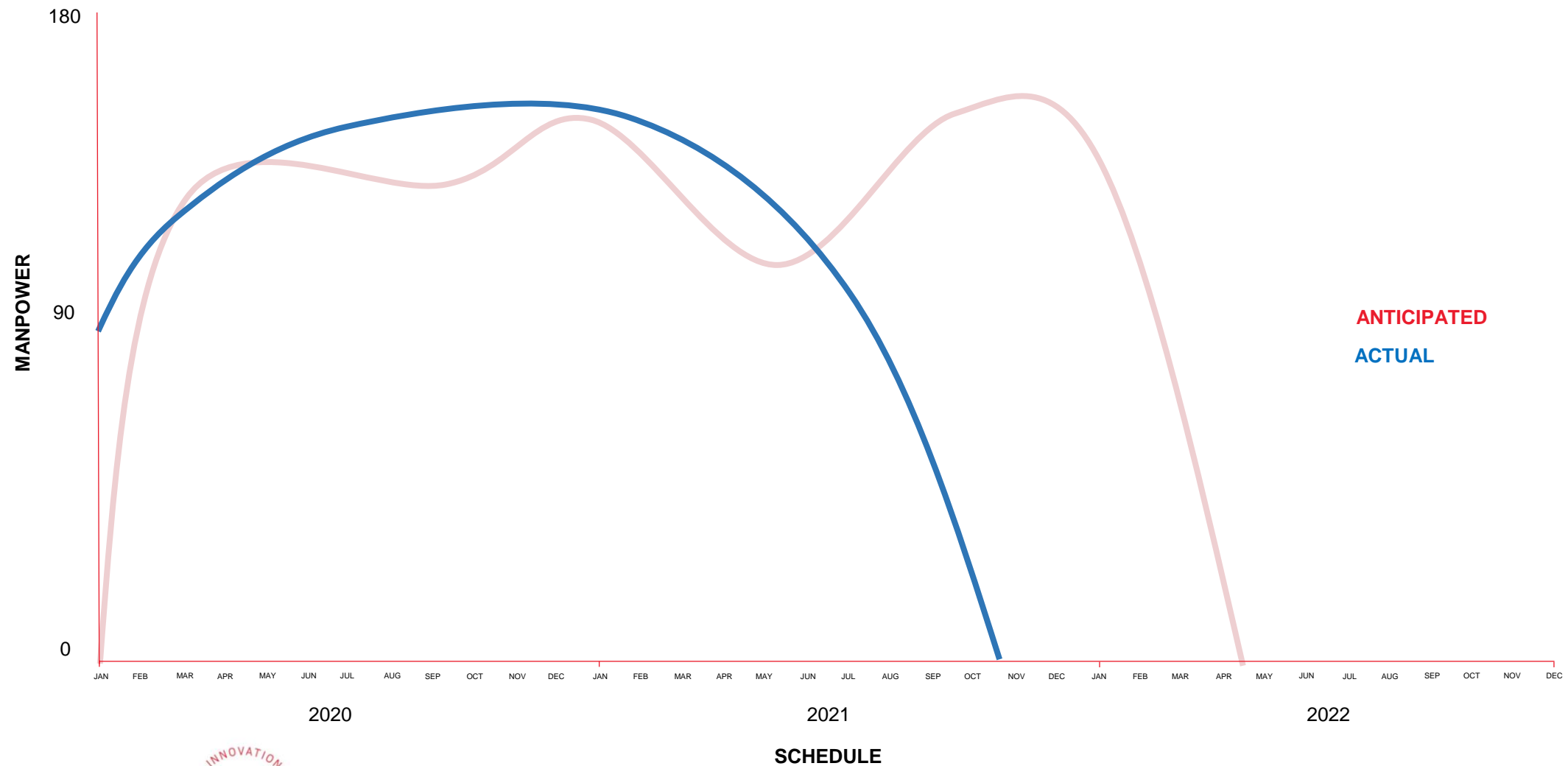


MODIFIED BATCH PLAN
(BY WEEKLY CYCLE)





Resource Leveling





Process Improvement



Failure Isn't Fatal: Lean Lessons from Soaring Eagle Casino & Resort



Benefits Observed



Attacking Process Waste

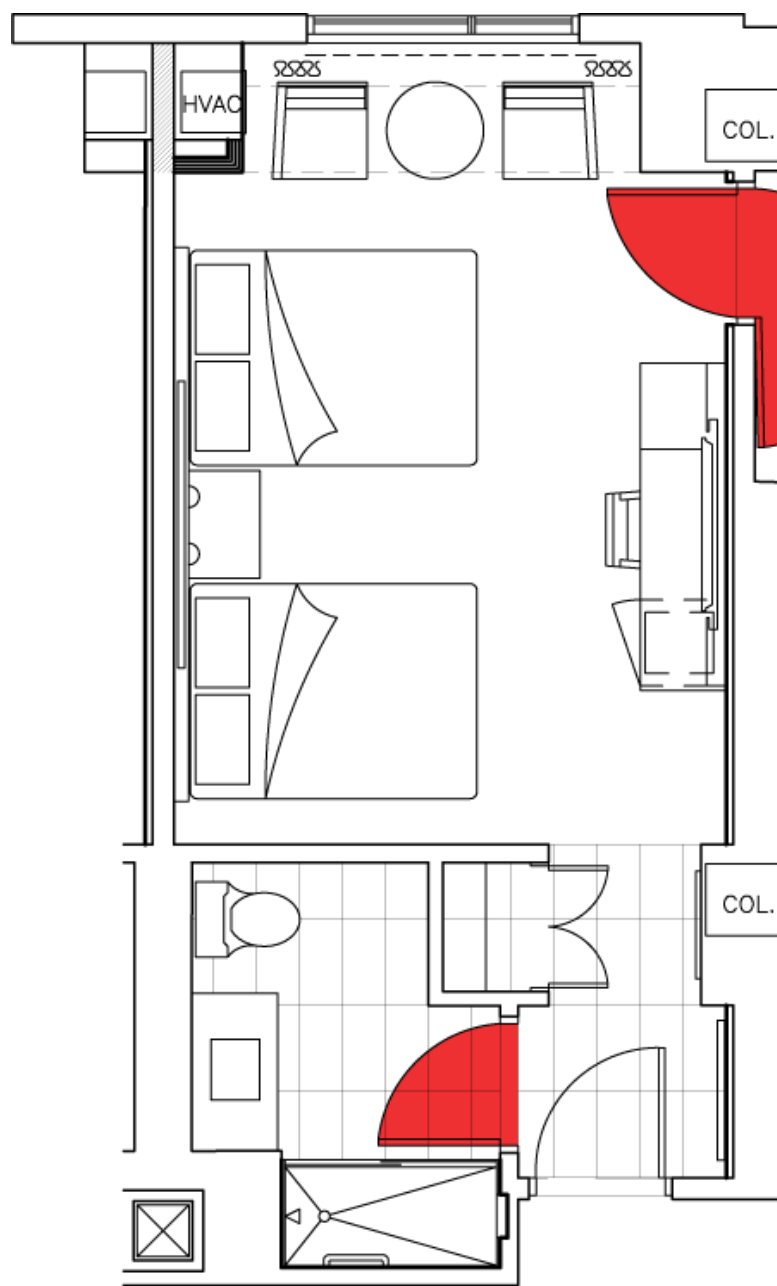
ROOM	TYPE	TV PROGRAMMING						PHONE				MATTRESSES		
		FFE Delivered	Electrical Trimmed	LV Finished	TV In Room	TV Program	READY FOR SECR IT	LV Finished	Stone Top Installed	Phone Installed & Programmed	READY FOR SECR IT	Room Cleaned	Mattress Placed	READY FOR SECR
4082	S-6	X	X	X	X	X	COMPLETE	X	X	X	COMPLETE	X	X	COMPLETE
4084	KA-3	X	X	X	X	X	COMPLETE	X	X	X	COMPLETE	X	X	COMPLETE
4086	Q-1	X	X	X	X	X	COMPLETE	X	X	X	COMPLETE	X	X	COMPLETE
4088	Q-1	X	X	X	X	X	COMPLETE	X	X	X	COMPLETE	X	X	COMPLETE
4090	K-10	X	X	X	X	X	COMPLETE	X	X	X	COMPLETE	X	X	COMPLETE
4091	Q-1	X	X	X	X	X	COMPLETE	X	X	X	COMPLETE	X	X	COMPLETE
4093	Q-1	X	X	X	X	X	COMPLETE	X	X	X	COMPLETE	X	X	COMPLETE
4094	K-1	X	X	X	X	X	COMPLETE	X	X	X	COMPLETE	X	X	COMPLETE
4095	Q-1	X	X	X	X	X	COMPLETE	X	X	X	COMPLETE	X	X	COMPLETE
4096	Q-1	X	X	X	X	X	COMPLETE	X	X	X	COMPLETE	X	X	COMPLETE
4097	Q-1	X	X	X	X	X	COMPLETE	X	X	X	COMPLETE	X	X	COMPLETE
4098	Q-1	X	X	X	X	X	COMPLETE	X	X	X	COMPLETE	X	X	COMPLETE
4099	Q-1	X	X	X	X	X	COMPLETE	X	X	X	COMPLETE	X	X	COMPLETE
4100	DK-2	X	X	X	X		READY	X	X		READY	X		READY
4101	Q-1	X	X	X	X		READY	X	X		READY	X		READY
4103	SK-1	X	X	X	X		READY	X	X		READY	X		READY
4105	SK-1	X	X	X	X		READY	X	X		READY	X		READY
4106	DK-4	X	X	X	X		READY	X	X		READY			NO
4107	Q-1	X	X	X	X		READY	X	X		READY			NO
4108	Q-2	X	X	X	X		READY	X			NO			NO
4109	Q-1	X	X	X	X		READY	X			NO			NO
4110	K-2	X	X	X			NO	X			NO			NO
4111	Q-1	X	X	X			NO				NO			NO
4112	K-2	X	X	X			NO				NO			NO
4113	Q-1	X	X	X			NO				NO			NO
4114	Q-2	X	X				NO				NO			NO
4115	DQ-1	X	X				NO				NO			NO
4116	K-9	X					NO				NO			NO
4119	S-1	X					NO				NO			NO
4120	Q-7						NO				NO			NO
4121	K-7						NO				NO			NO
4122	K-7						NO				NO			NO
4123	Q-7						NO				NO			NO
4124	S-2						NO				NO			NO

Implemented tracking tool stored on SharePoint for live updates by the minute, which then dynamically communicated to a visual schedule





Eliminate Production Waste



PHASE 1&2 – Salvage Door
6 Hours Per Door

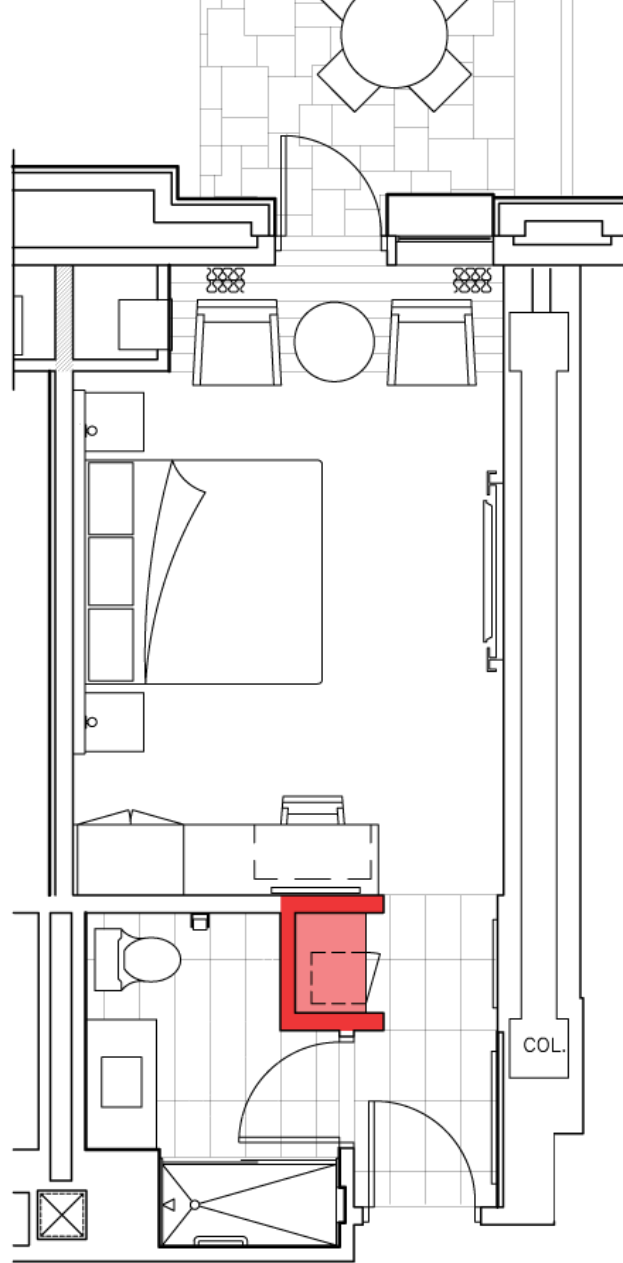


PHASE 3 – New Door
2 Hours Per Door

- Credit – Painting
- Credit - Storage



Improving Flow



PHASE 1

1. Casework
2. Shelf Brackets
3. Frame AP
4. Set Stone
5. Paint AP
6. Install Shelf

PHASE 2

Activity 1

- Casework
- Shelf Brackets

Activity 2

- Set Stone

Activity 3

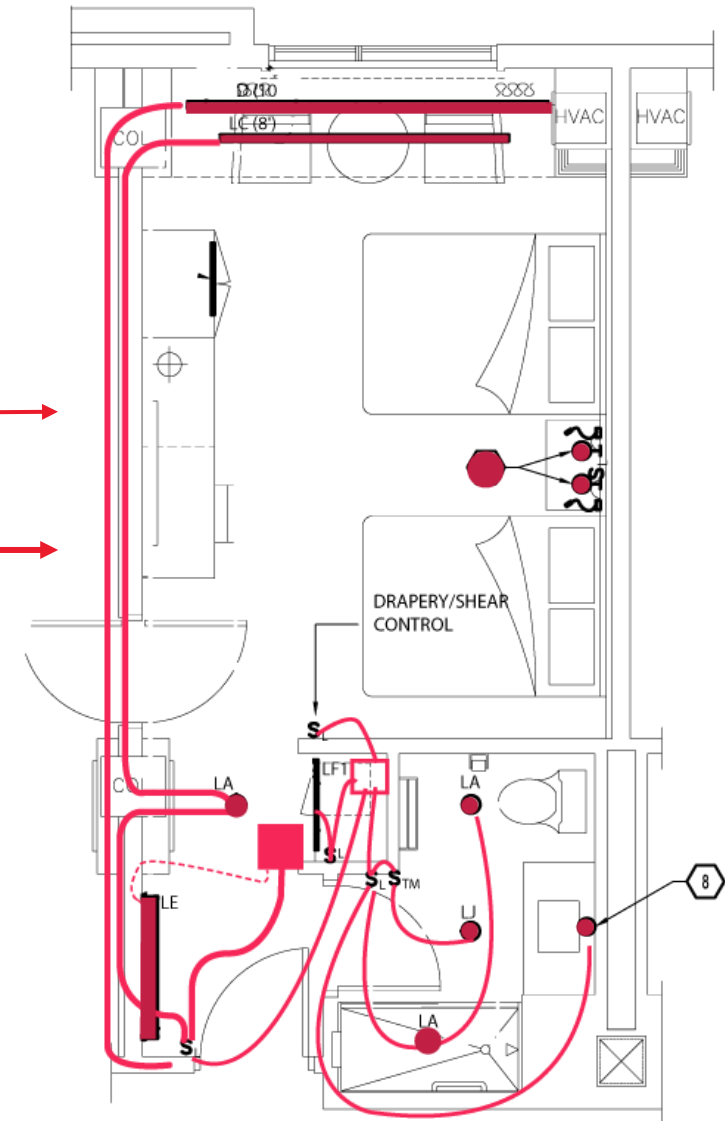
- Pre Fabricated AP
- Install Shelf

6 Trips Into Room



3 Trips Into Room

Success Breeds Success



Success Breeds Success



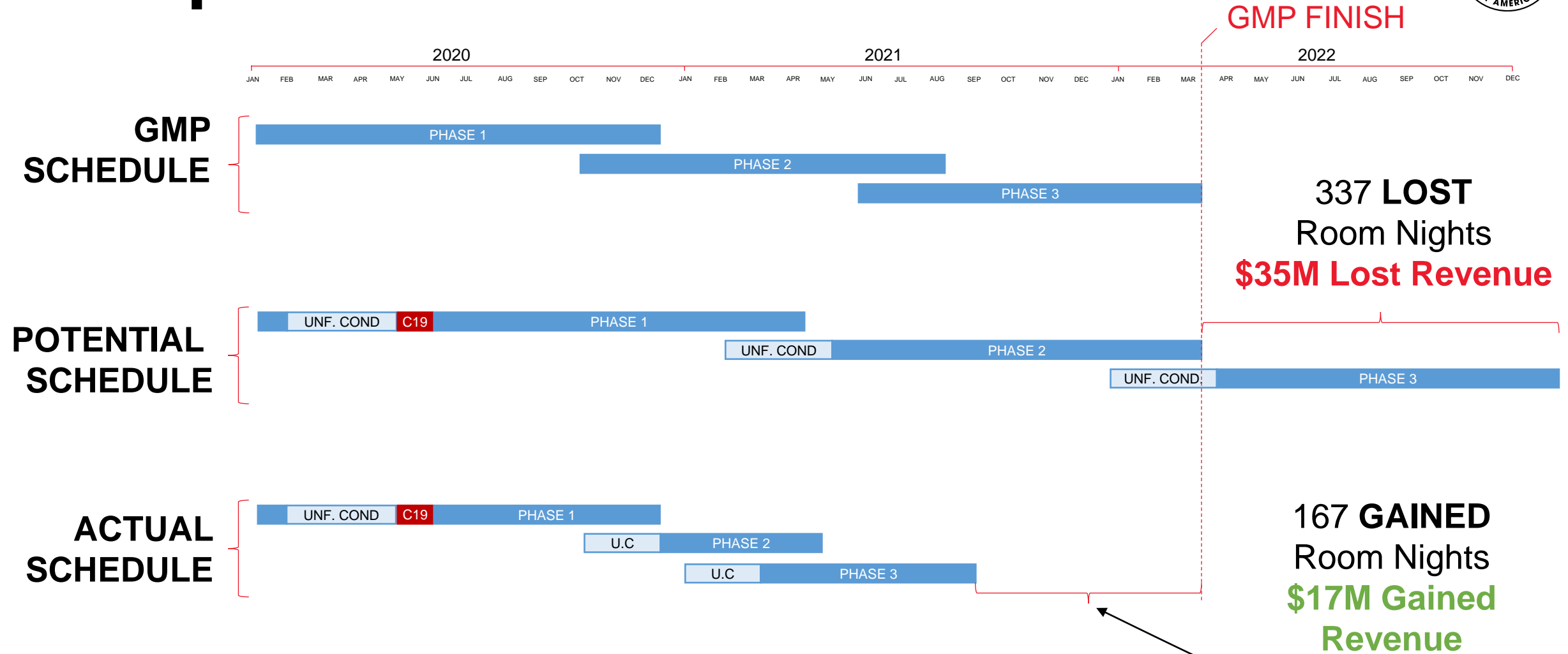


Tangible Impacts



Failure Isn't Fatal: Lean Lessons from Soaring Eagle Casino & Resort

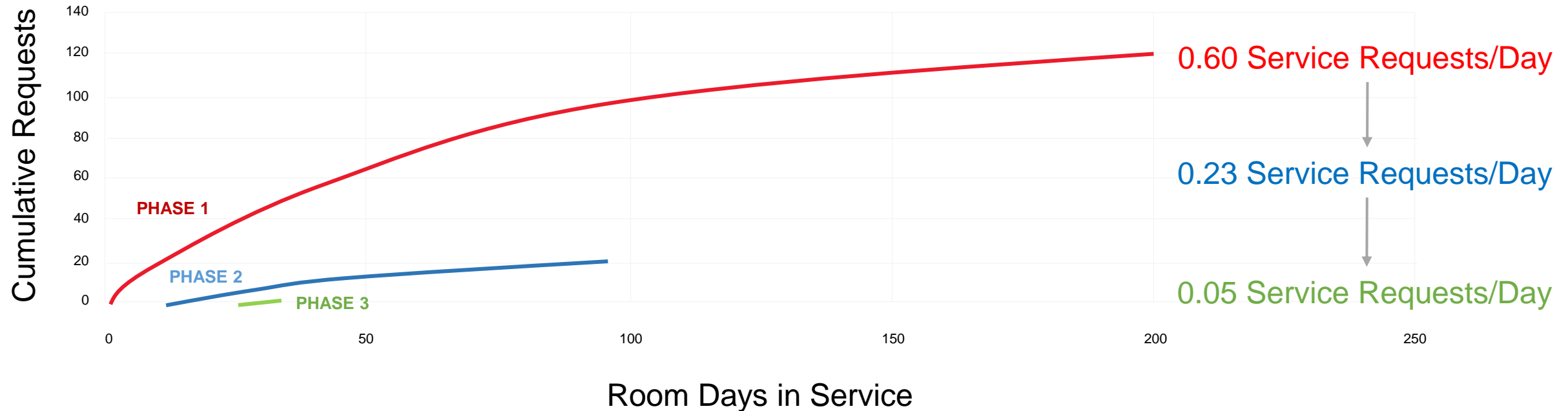
Impact of Small Js...on Schedule





Impact of Small Js...on Quality

Cumulative Service Requests by Phase





Thank you!



Failure Isn't Fatal: Lean Lessons from Soaring Eagle Casino & Resort