LESSONS LEARNED FROM THE MAKE READY PROCESS IN A HOSPITAL PROJECT

Kevin Britt[1], Thais da C. L. Alves[2], Dean Reed[3] and Brian Gracz[4]

ABSTRACT

A previous paper (presented in the IGLC 19) described the journey a Construction Management team on a large hospital project had to go through to set up the lookahead process and the Last Planner® meetings. This paper presents in more detail how the team specifically managed the make ready process and the constraint identification and resolution process related to building a ground-up hospital in California as well as discusses lessons learned during the project. The team distilled a number of lessons learned which are summarized in the paper under the following main headings: need to change participant's mentality from a hard-bid to a collaborative environment through alignment; build a high performing team; the right processes and tools are useless without respect for the people; create a culture to promote continuous improvement; and understand the team's needs to create pull and reduce cycle times through the SWAT process. These lessons learned are discussed and illustrated with examples from the project and linked to Lean concepts that whether implicitly or explicitly helped the team to successfully complete the project.

KEYWORDS

Make ready process, healthcare, lessons learned, high-performance teams, value

INTRODUCTION

This paper discusses the journey a Construction Management team on a large hospital project had to go through to organize and manage the make ready process and the constraint identification and resolution process related to building a ground-up hospital in California as well as discusses lessons learned during the project. Building codes in California are very strict for hospitals due to the need to remain operational after a major earthquake. Approval processes through the state run building agency – Office of Statewide Health Planning and Development (OSHPD) – are often lengthy due to strict code requirements and government-related resource issues resulting from the current state budget crisis. Design and construction tasks often face the need to innovate to meet code and installation requirements within the Owner's desired budget and time constraints. Construction Managers have to juggle all these requirements in addition to managing an extensive global chain of suppliers.

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[1]   DPR Construction, 5010 Shoreham Place, San Diego, CA 92122, USA, Phone +1 858/597-7070, kevinbr@dpr.com

[2]   Assistant Professor, J.R. Filanc Construction Eng. and Mgmt. Program, Dept. of Civil, Constr., and Env. Eng., San Diego State University, San Diego, CA, USA, talves@mail.sdsu.edu

[3]   Director of Lean Construction, DPR Construction, Redwood City, CA, deanr@dpr.com

[4]   DPR Construction, 5010 Shoreham Place, San Diego, CA 92122, USA, briang@dpr.com

In this context, the team distilled a number of lessons learned which are summarized in the paper. These lessons learned are discussed and illustrated with examples from the project and linked to Lean concepts that whether implicitly or explicitly helped the team to successfully complete the project.

ALIGNMENT, INTEGRATED PROJECT DELIVERY, AND THE MAKE READY PROCESS

Alignment is included in the Construction Industry Institute's list of best practices and it is defined as: "(t)he condition where appropriate project participants are working within acceptable tolerances to develop and meet a uniformly defined and understood set of project objectives" (CII 2011). The objectives set by the owner provide the starting point for designers and builders to define additional objectives, which also merge with their business objectives, and will be deployed to project participants and communicated through different documents (CII 2003).

During the process of communicating project objectives to the team, feedback links are important to promote consistency between the set objectives, practices, and actions to implement the owner's wishes (CII 2003). Primary mechanisms to communicate the objectives and promote alignment include, but are not limited to, request for proposals (RFP), contract documents, policy and procedure manuals, and preconstruction meetings. Reinforcing mechanisms might include weekly progress meetings, executive level reviews, toolbox safety talks, and direct, open communication (CII 2003).

Alignment of different systems necessary to manage a project is also important for its successful completion and for the implementation of an *integrated project delivery (IPD)* environment. A team might fully adopt an IPD contract or choose to implement basic IPD tenets in terms of collaboration and organization, use lean principles/tools, and risk/profit sharing aiming at an "IPDish" environment. It is worth noting that not all teams, projects, and environments might be suited to a full IPD agreement; thus the existence of what NAFTA et al. (2010) calls IPD-ish or IPD "lite" projects.

In an IPD environment, Darrington et al. (2009) stress the importance of the triad project organization, commercial terms, and operating system proposed by the Lean Construction Institute. *Project organization* comprises the definition of how participants are organized to deliver the project, how they communicate, and collaborate including but not limited to the existence of mechanisms to promote integrated governance and high performing teams (with key players of the project engaged in the decision making process). The *commercial terms* comprise the contractual structure of the project, how that is organized to support the organizational and operating systems, and how it defines risk/profit sharing, incentives and contingency, among other contractual clauses. Finally, the *operating system* comprises the definition of how the project will be managed and the use of practices that reflect a production philosophy that promotes the reduction/elimination of wasteful practices, the management of tasks to deliver value to the client and a smooth work flow to the trades, and the enhancement of communication among team members.

THE OPERATING SYSTEM AND THE MAKE READY PROCESS

One of the distinct characteristics of IPD and IPD-ish projects is the use of Lean Construction concepts, principles, and tools to manage production and to define its operating system. Differently from other delivery methods which do not address the operating system in detail (Darrington et al. 2010), IPD-like project teams tend to be well-versed in Lean tools or at a minimum to make an effort to implement them (AIA 2012).

Along these lines, the definition of commitments and the process of tracking how many of the promises made are in fact honored week after week are at the core of the Last Planner® System (LPS) (Ballard 2000), which is usually the backbone of production management in IPD projects. Within the LPS, great attention is paid to properly identifying and defining tasks, as well as making them sound before they are assigned to production crews aiming at shielding production from uncertainty and variation (Ballard and Howell 1998). The process of screening tasks for constraints (or roadblocks) and addressing issues that need to be resolved before tasks hit the construction stage is called the *make ready process* (Ballard 2000). This process is crucial to secure commitments from trades, designers, owners, and other participants because no one wants to promise to complete a task that cannot be done if constraints are not removed. The make ready process requires that key players embrace the project's objectives and work together to assure constraints will be addressed.

Along these lines, the efforts to align the team's objectives, work to remove constraints and promote flow, and to create an IPD-ish environment could be seen in the project discussed. The case presented addresses specifically the efforts the team made to improve their make ready process which supported, as well as benefitted from, the alignment of the team and ultimately contributed to the successful delivery of the project.

THE PROJECT

The project described in this paper is a large $945 million dollar healthcare facility in San Diego County (740,000 SF building, 60,000 SF central plant) within a 53 acres area with 32 of these being usable area. The hospital has 360 patient rooms (288 at opening), 12 operating rooms, and 48 emergency department treatment rooms, and its construction duration was 54 months. The project was built under a Construction Management at Risk (CM at risk or CM/GC) delivery method using multi-prime contracts (83 separate contracts). Key trade contractors had incentive-based contracts and were part of a high performing team described later in the paper.

In total, 4,166,965 work hours were used to build this facility by 925 onsite craft workers, and 80,000+ agency inspections were performed. Regarding document processing, 6,282 requests for information (RFIs) were processed, as well as 2,041 project submittals, 731 OSHPD change orders and 340 architect's supplemental instructions. 150 professional staff personnel were based onsite. The project was completed 4 days ahead of the initial schedule completion and the team achieved $36 million in savings to the Owner.

It is worth noting that the high number of RFIs in this project was really a result of two things: 1) being an OSHPD project where every change has to be documented in some "official paperwork" from the design team. Many of the changes required RFIs before the team would be allowed to proceed in the field; 2) There were numerous

design packages on this project that all ran through the state agency separately. This process resulted in questions that were answered after an official permit via RFI before they were captured in a construction change that went back through OSHPD. This was done to assist with procuring / planning the work.

The project's design phase ran from 2004 to 2008 and construction began in late 2007. However, a replacement CM was brought into this project in July 2008 when grading and mass excavation were completed and construction was well under way for the sub structure. Even though the replacement of the original CM occurred relatively early in construction – about 15% of the way through the foundations of the Hospital, there were problems that had been building up in the project. The dynamics of the project were heading towards a culture of placing blame, lack of alignment, lack of accountability, problems with the decision making process, and most importantly, a significant lack of trust by many parties.

In order to deliver such a large and complex project the team had to devise ways to align the team members and promote collaboration. The following sections focus on how the team worked on the make ready process to solve problems ahead of production and promote flow, and the lessons they learned along the way. The discussion presented is based on accounts of two of the authors who were part of the managerial staff employed by the CM and indicators collected by the team throughout the project.

THE MAKE READY PROCESS AND THE SWAT PROCESS

During the early stages of production planning on the project, the team's primary focus was attempting to instil a collaborative planning environment for the trade contractors (TCs) to make production commitments. The concept of shielding production or making work ready was treated as a by-product and often seen as an annoyance or hindrance to the main focus of the meetings. Too often, the CM's project managers felt as if TCs were providing 'excuses' for their inability to plan or perform work by communicating lists of information that they did not have. When the TCs communicated items they needed, such as answers to requests for information, change orders, coordination issues, etc., the CM felt they were adequately tracking this information since topics were being written down on a white board during the meetings. Assumptions were that the CM staff members were taking notes about the relevant issues during the meetings and then discussing these issues with people who could help addressing them or writing requests for information (RFIs) to get things moving after the meetings. Moreover, there was an assumption that issues were adequately being resolved since a group of executive leaders on the Owner, CM, design, and trade contractors sides outside of the production meetings were discussing the issues in coordination meetings. However, the issues were not being resolved fast enough to align with the priorities and fast pace of production crews. Major project issues such as defective HVAC equipment, OSHPD special seismic certifications, and supplemental seismic support steel coordination and installation issues were being addressed and solved, but not ALL problems and constraints impacting production were receiving equal attention. There was a perception by project participants that the main focus should be on the major issues that could stop the project and the smaller issues would work themselves out even if they caused out-of-sequence work due to 'work arounds' (proceeding with

work without having all the right information and then not completing certain areas 100%).

The CM made many tweaks and modifications to the production process because the CM's team was getting frustrated by lack of TCs participation and engagement on the definition of production commitments. In reality, it was very challenging for foremen and TC managers to make sound commitments because they did not have the information, e.g., RFIs, change orders (COs), they needed to make sound commitments.

The project started preconstruction in 2006 while construction started in late August of 2007. The replacement CM was awarded the work in May 2008 and it took over on July 7th, 2008. With that the CM started immediately with establishing new project processes and began the High Performing Team (HPT) process in September 2008. However, real change did not start until the HPT was really established and functioning which took about a year.

Eventually in April 2010, dedicated meetings were conducted with key onsite design, Owner, and CM leads to attempt to align the production needs with the workloads of the design staff. This was an attempt instill a Last Planner methodology for design managers to harvest commitments from design teams to achieve quicker responses of the traditional processes for RFIs, COs, and other design-related documents. At this point, the architect was still referencing and expecting 'review time' that contract language gave to respond to RFIs, review submittals, and perform other required tasks. The meetings were held in a conference room at the site and questions were asked to the architect – "When will you commit to answering RFI #xxxx?", "When will you commit to issuing COxxxx to OSHPD?" Nevertheless, there was a problem with these meetings: the group attending the meetings was not in direct communication with field foremen who knew the details of issues needing to be resolved where the issues were happening – in the field. While a handful of the right people were in the conference room, the people who knew the most about issues were not present. 'Middle layer' managers were present at the meetings attempting to pass information up from the field and communicating information back from designers/engineers who were sitting in companies' headquarters offsite.

By November 2010, the dedicated meetings were still not able to effectively resolve issues in a timely fashion. A strategic meeting on 11/30/10 was held by an Owner representative, the architect lead, the CM project executive, and the main author who at the time worked in the project as a "roadblock expeditor". The group decided that they needed to change/improve any process that needed to be changed so that all the right people could be connected and issues could be addressed. The key result of this meeting was that the Owner agreed to pay the designers and engineers (who had been located in their corporate offices) for additional time and travel to site. Three days later, the team started weekly meetings with the Owner representatives, the CM, the designers, and the TC foremen that were held <u>in the field</u> looking at key issues at the very location where they were happening – as soon as they were discovered and prior to any formal written documentation. In an attempt to label this process with something new and to communicate the seriousness of it, the group called themselves the "SWAT" team as a reference to **SWAT** (acronym for "**S**pecial **W**eapons **A**nd **T**actics") which "is a commonly used proper name for law enforcement units, which use military-style light weapons and specialized tactics in

high-risk operations that fall outside of the capabilities of regular, uniformed police" (Wikipedia 2014). As a result, the SWAT process was born with the primary objectives of conquering the make ready process and addressing/removing constraints.

During the course of this project a software tool was adapted to manage constraints in a visual format and an innovative process was developed to increase the flow of information into the field. Different types and severity of constraints require review and approval from different members of the construction team involving the CM, the Owner, subcontractors, designers, suppliers, and OSHPD. The quantity of constraints was considerable and could not be tracked effectively and visualized accurately outside of structured meetings. This large number of constraints to be resolved was due to on-going value engineering efforts and the way the packages were structured for submission for review and approval. Additionally, the Owner allowed many end-user changes even during construction.

In order to improve visibility and understanding of the interconnectedness of constraints to the flow of work and production, the Construction Manager adapted a tablet based visual punch list software to identify and track project constraints. After the process was implemented constraints were prioritized according to their urgency and whether or not they could be resolved at the construction site with the project team or would need OSHPD approval. The team implemented "SWAT meetings" which enacted the go and see mentality of project issues using this visual tool; the Owner supported having designers spend more time on site; and the CM held meetings that connected the designers and the trade foreman in the field at the location of the constraint. The process fostered intense collaboration among the project builders, designers, and Owner and resulted in faster removal of constraints.

On 12/3/10, the first SWAT meeting was deemed a success for several reasons. The meeting was attended by all key stakeholders in the project – contractors, design team members, and the Owner – and the CM team was finally able to connect the conversations between the people who needed information and the people who were providing information. Moreover, a detailed analysis of the open issues that were impacting production was completed and prioritized ahead of the meeting, and finally the prioritized items were walked with the right team including the foremen involved and many were resolved within 24 hours. For instance, the CM team was able to review an item on the field that was impacting overhead coordination above one of the hospital rooms. This problem had been on-going for several weeks and the design team had stated that the issue was resolved. After walking this issue with the foreman who had not received clear information and was still impacted, he was able to effectively communicate the true impacts and the issue was reopened, clarified, and resolved in a very timely manner

The software used to track RFIs and COs was modified to manage all running issues during the meetings, roadblocks, hot items, etc. The project staff was instructed to first bring issues to these meetings as opposed to following the traditional processes of writing RFIs, COs and other formal or informal documentation, such as emails, meeting minutes etc. Decisions on how to proceed with communicating an issue were defined on the spot from the executive stakeholders attending these meetings. The sense of urgency and morale spiked at this time among project participants. Foremen were happy to get information faster; they were inspired to be meeting with key design and Owner leads to work through issues.

An important benefit of the SWAT process was the improved quality of solutions and timing to resolve issues. Now that the right people were talking, people knew what should or should not be contained in RFI or CO documents. The process reduced information overload, which helped team members to focus on pressing issues instead of sorting through too much detail in RFIs and COs. A document triage team (consisting of SWAT team reps) was put in place to review CO documents after the drawings were prepared to flush out situations where designers attempted to add additional design information that was not discussed in prior meetings. The triage team was able to effectively prioritize and align the COs and RFI response against the priorities that were needed in the field – things already impacted or about to be impacted. Documents were condensed in their contents so that OSHPD field reviews could approve documents on a weekly basis. While this potentially added more CO and RFI documents, it kept progress moving forward in the field and avoided additional impacts. "Supporting the front lines" in the field became the team mantra.

This shaved a tremendous amount of process waste downstream when people needed to question "WHY" things were in CO documents that should not have been. In addition, once COs were approved by OSHPD, the handling of approved documents changed and improved (as they were priced and approved in parallel with the OSHPD review) so that they would be immediately released to the field to install (circumventing a detailed pricing exercise). This was able to happen because of the thorough quality control and prior approval to proceed with change by the Owner right when the issues resolution was first determined. The Owner's involvement in the SWAT walks and triage meetings can be credited as one of the reasons the process started working so well.

Another ancillary benefit of the SWAT sessions was that production meetings were improved and more efficient. Teams no longer needed to drill down on the details of a roadblock during planning meetings – they simply added the subject and key data into the tracking tool that everyone was using which automatically added it to the next SWAT agenda. This essentially was scheduling a meeting between field last planners and designers to flush out the details of an issue in smaller groups with the right people versus large meeting environments with people not interested in resolving issues not related to their trades.

Moreover, teams now knew who the 'right people' were to go to get things resolved and information could be communicated directly with them rather than following a traditional process of logging documents and then discussing as agenda items in large meeting formats with the Owner, Architect, and CM (such as OAC Meetings which were eventually cancelled as they were non-value added). Everyone shared the same sense of urgency to achieve milestones and area completions since ALL the 'right people' were regularly in the field seeing progress and addressing constraints which impaired the work of trades. The teams began to form a true sense of teamwork to achieve a common mission to complete the project. This was not happening in the bureaucratic processes that existed prior to the SWAT process. This teamwork was crucial as it worked well during the last year during the much needed final – and crucial – push of the project. The same SWAT mentality and process was rolled into the completion/punch list processes at the end of the project. That resulted

in the project having zero open punch list items when the project was turned over to the Owner at substantial completion.

LESSONS LEARNED

CII (2011) considers the practice of documenting and sharing lessons learned as one of its best practices and defines it as "(a) critical element in the management of institutional knowledge, an effective lessons learned program will facilitate the continuous improvement of processes and procedures and provide a direct advantage in an increasingly competitive industry." The change in the make ready process just described did not happen as a consequence of the implementation of the SWAT process alone and many lessons were learned throughout the change. It was a result of other structural changes in the way the project was run and how stakeholders (all the way from the Owner representatives to the foremen and workers in the field) communicated. The team intentionally worked to avoid the five dysfunctions of a team as indicated by Lencioni (2002): absence of trust, fear of conflict, lack of commitment, avoidance of accountability, and inattention to results. The project went through a long road of trust building by understanding how key people were addressing the project, their work, and their role in accomplishing major milestones. The following list of lessons learned address important nuggets of experience gained by the team.

LESSON 1: BUILD A HIGH PERFORMING TEAM.

Even though the project did not have a formal IPD agreement, or contractual language defining the mechanics of how collaboration would take place, participants agreed to create a high performing team (HPT) to align interests, engage key project participants, and to efficiently resolve issues. The HPT members were the Owner representative, the CM, the architect, and the structural designer; they had the executive authority to make changes but needed to follow the contractual requirements to do so. The HPT included two representatives from the Owner. When strategies were discussed within the HPT Meetings that required a contractual change they were executed outside the meeting by these members. An example is the additional services for the Architects to complete the on-wall coordination or the CM's services to extend into supporting the fit-up and activation of the hospital. This team agreed to define incentives for beating the project's budget and also defined risk provisions in their individual contracts to deal with budget overruns. For instance, trade contractors had cost plus fee contracts to reduce risk and promote collaboration, and they also agreed to put some of their profit at risk if the budget was not met while also receiving incentives for savings (shared savings).

The HPT was also tasked with monitoring how well the mission statement and core values for the project (Figure 1) were being achieved. A number of metrics were defined to track the implementation of core values in different work routines. For instance, to measure the implementation of the "trustworthy" core value the team measured the percent plan complete (PPC) indicator and worked towards learning from their plans.

Project Mission Statement
Revolutionize today to impact tomorrow: design, construction, and healthcare.
Project Core Values
Pioneering – We challenge the norm.
Trustworthy – We build with integrity.
Proud –We excel in our craft.
Inspired – We bring passion every day.
United – We encourage common goals and celebrate shared success.

Figure 1: Project mission and core values

LESSON 2: NEED TO CHANGE PARTICIPANT'S MENTALITY FROM A HARD-BID TO A COLLABORATIVE ENVIRONMENT THROUGH ALIGNMENT

As mentioned already, the CM was hired to replace a previous CM while construction was already underway. It did not take long to realize that there was an obvious need to change participant's mentality from a fragmented design-bid-build (usually described as a defensive, "every man for himself" attitude) to a collaborative risk-sharing environment. When the CM was awarded the project there was open acknowledgement by the Owner that they were concerned over the budget and schedule of the project and were not sure if the information they had was still valid. Moreover, the earthwork and concrete TCs had completed a significant amount of change order work (approximately $3M) and were not sure how it would be reimbursed. Also, there was a lot of finger pointing within meetings of who was not doing what and/or not meeting commitments. Finally, the Owner would not have made the exceedingly hard decision to switch CM without something really being wrong.

Contractors often develop the skills to protect their financial interests , and it takes time for them to realize the need for different behaviors in an IPDish environment like the one in the project. Early in the CM's work at this project, key trades (mechanical contractor, electrical contractor, structural steel, and cast in place concrete) completed an online survey to share their experiences in the project, and the answers were reviewed by the CM in a meeting facilitated by a consultant. This exercise helped the CM to understand the current environment and climate of the project and to draw a plan to move forward aligned with the reality of the project.

Moreover, a "virtual board of directors" consisting of key executives for the Owner, Architect, CM and Structural Engineer was created to promote intense communication and collaboration between these key players in the project and to begin building a trust based High Performing Team (HPT). They became better aligned through developing a charter with the project's mission and core values, which were then shared with team members of the key stakeholders on the project as a means to promote alignment of those involved with the project. The idea was to engage all the leadership in the HPT process so that everyone felt inspired to be part of the HPT, not just executives.

The exercises to survey the team's experiences and to create the mission and core values were also means to deploy the Owner's and internal clients' vision for the project. This is very much in line with Lean Thinking principles which call for the definition of customer value before work starts on the value stream that delivers a product. The client wishes were translated into a mission and core values for the project, and these were explained to the trades and the entire project value stream

(designers, managers, trade contractors, suppliers, inspectors, and OSHPD) as a means to creating accountability and aligning the team towards meeting the client's needs. The team became more and more aligned over time and that ultimately helped the make ready process as team members were engaged and committed to meeting major project milestones.

LESSON 3: THE RIGHT PROCESSES AND TOOLS ARE USELESS WITHOUT RESPECT FOR THE PEOPLE.

A previous paper "working to improve the lookahead planning" (Alves and Britt 2011) identifies the processes and tools the project team developed and used throughout the journey on building this hospital project. That paper explains these processes within the context of the "developmental sequence in small groups" and the tools used to support the implementation of the Last Planner® System. Throughout the project, in the planning and scheduling world, we often equate success as a result of a "good" pull planning session, or trade contractor participation and engagement, or quantity and quality of an update within a tracking tool. These things, along with the omnipresent push for 'getting things done' were the barometer for validating short interval planning success.

The successful implementation of the planning 'system' processes and tools is very important. However, the team learned that not only did they need to change the "game" by cultivating collaboration as mentioned above, but they also needed to put forth a deliberate effort in cultivating inspired people at all levels of the project to deliver a great project for the Owner, and ultimately the community. With that in mind, the team put into practice the following ideas:

- Listened, really listened to the trade contractors and provided them with the information they needed and were requesting. This was highlighted within the SWAT process.

- Enabled trade contractors to be decision makers in the process, diversifying the leadership and being more inclusive to hear different perspectives about what to do to get the work done.

- Engaged the craft via palo-o-meter, special barbeques, foremen dinners. The palo-o-meter was an interactive wireless survey device (connected to the Internet for live updates) placed in an area of the project high traffic. The device would survey workers (about 300 responses a week) and give the team the pulse of the project and the ability to quickly know about negative responses and have a chance to work on them. The palo-o-meter allowed the voice of the workers to be heard and provided an additional channel of communication between them and the project management team. Additionally, the entire project team had a chance to participate in a "family day" (about 1,000 people attended) when project participants could bring family members to see their work and what they were accomplishing as a team. Finally, the foremen dinners were opportunities for the upper management to meet with these "last planners" in groups of 20 and have a chance to thank them for their hard work and provide them a channel to give direct feedback about the project (what do you need to make your work more productive?) and let them ask questions about decisions made at the project level.

LESSON 4: CREATE A CULTURE TO PROMOTE CONTINUOUS IMPROVEMENT

The culture within the High Performing Team on the project significantly strived for and embraced continuous improvement amongst the craft and stakeholders. Everyone was empowered to provide ideas and offer insight to improve something and even implement their ideas and changes – even if additional funds were required. This was very much a KEY to the project success. Leaders inspired craft, encouraged collaboration, and harvested ideas while financing improvement innovations and mostly anything to get the right tools to the right people.

Lesson 5: Understand the Team's Needs to Create Pull and Reduce Cycle Times through the SWAT Process.

As the team become more aligned, the make ready process evolved and the prioritization of roadblocks to be removed became based on field needs and the reality encountered on site. An example was when the team was installing electrical rough-in at the operating rooms. The exact grounding design requirements were late to be issued to the field in a CO and the foreman had questions and input that would enable the already installed materials by code and original design to remain without additional costs. The team was able to meet with the foreman, designers and the inspectors of record to gain alignment and clarity around the issue, modify the documents accordingly, and issue the approved documents in time to meet the scheduled inspections. The mission of the SWAT process to create flow and streamline the communication process was vital to promote flow and allow trades to develop their work in a smooth fashion. RFIs and change orders were prioritized to promote flow, and people who were able to address the issues called for in these documents were going to the field (*gemba*) to see problems first hand. Taking those responsible for answering RFIs and COs to the field increased awareness and visibility to stakeholders, and created a sense of urgency to resolve problems that hampered production. The practice also reduced the cycle time between detection and correction of problems that had more impact in the production value stream and could hamper the creation of flow.

CONCLUSIONS

A case outlining how the make ready process evolved in a large and complex hospital project was described and the lessons learned by the team were discussed. The CM team started work in this project by defining the project's mission and core values, and by surveying key players to define a plan to move forward. These activities helped the team to understand value for the client and project participants and to align stakeholders to meet major milestones and deliver the project as expected.

Main lessons learned included the importance of listening to project participants to promote alignment, respecting/valuing people and their contributions. Additionally, working to promote pull based on clients' needs, and the creation of a culture to pursue continuous improvement were also essential lessons learned by the team.

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