Background

The Boston Regency Plaza Hotel Complex is a 22-story, mixed-use, luxury development comprising of a 300-room hotel, 96 luxury condominiums, 2 floors of mixed-use food/amenities, and 300 underground parking spaces. The condo development targeted a market of wealthy, late-middle aged couples. This case study presents an interesting challenge with respect to choice of project delivery for two main reasons.

First, this project was the Regency Hotel Group's first experience with condominium development. The Regency Hotel Group was already a world-renowned luxury hotel developer, owning and operating 24 luxury hotel properties around the world. On past projects, it had already developed a good relationship with the project's chosen architect KDS Associates, which also had good experience in hotel development. However, by entering this new market sector of condo development, they chose a challenging project where they had less background experience. To make up for this, they hired both a well-known condo marketing consultant (Russell Farley) and separate project managers for the hotel development (Jeff Cunningham) and condo developments (Kris Hodgkins).

Second, the Regency Hotel Group chose to offer to condo owners the option to customize their condo units. This was an important source of value to the Regency Hotel Group because it prides itself on being a high-end developer that emphasized customer service and high quality. However, this added complexity to the design process by involving additional parties: the condo owner (customer), the interior designers working for the customer, and the architect working for the owner to coordinate custom design changes. It also added literal design complexity, since the rooms were not necessarily the same uniform design, as is with standardized hotel rooms, and it added scheduling complexity because the design changes were proposed after construction started.

The following analysis will focus on the progress and delivery method of the condo development, although the progress of the hotel will be mentioned since it affected the working relationship between parties involved in the condo development.

Project Delivery Method

Multiple project delivery methods were considered, including general contractor under a fixed sum contract, under a cost plus contract, and under a guaranteed maximum price contract. The Regency Hotel Group ultimately chose to organize the project through an owner's representative and a simple general contractor with a lump sum contract awarded based on price.

The owner (Regency) discussed and developed initial conceptual design with the architect (KDS) and other local stakeholders (including the Boston Redevelopment Authority). Towards the end of the conceptual design stage in the spring of 2005, Regency hired the project manager (Hodgkins) and a condo marketing consultant (Farley). Although many key design elements, such floor plate and location of elevator, were pre-determined based on the structural constraints, Hodgkins made a few key design choices at this stage, including the number, size, and distribution of condo units.

General contractors bid on prices based on design drawings and bid documents prepared by KDS. The owners chose price as a main factor, ultimately hiring the lowest bidder (Kelly Construction) as their general contractor, who then hired the subcontractors.

Work, schedules, and monthly pay-requests submitted by the subcontractors were approved first by the general contractor and then by the owner's architect and project manager, and the general contractor acted as the quality control for the subcontractors by holding back 10% retention of the contract amounts to ensure final punch list items/corrections were completed by subcontractors.

Progress

Although the owner and the architect had a good relationship due to past projects, this Regency Plaza project encountered challenges from the beginning, which only got worse as the project went on and frequent design changes were proposed.

The first challenge occurred during discussions between the Regency Hotel Group, KGS, the Boston Redevelopment Authority, and other local stakeholders on the conceptual design phase due to the complicated structural design of stacking condos, hotel rooms, and a parking lot.

Later, during the hotel construction, design changes and poor quality caused friction between the owner and the general contractor. The Regency project manager Jeff Cunningham was upset by schedule delays and an expensive flooring re-installation, which Cunningham believed to be due to improper installation by the workers. The general contractor was upset by the frequent design changes and specialty detail, since the original contract already had a tight schedule and tight budget, without any buffer/flexibility for such design changes.

These design changes not only worsened the relationship between the owner and the general contractor for the hotel construction, it also caused ripples in the schedule and budget of future condo construction. Design changes and redesigns had the direct cost of additional man-hours and labor costs for the owner's architects, the general contractor, the subcontractor supervisors, and the subcontractor workers. In addition, the general contractor suffered from expensive

inefficiencies and increased subcontractor premiums; subcontractors could demand claims of up to \$25,000 for every out-of-sequence work.

During the spring 2007, some manpower had to be shifted from the condo construction to the hotel construction in order to meet the hotel opening deadline of July 15. So although the hotel construction was near completion and on track to open on-time, by late June 2007, the condo construction was already behind schedule and over budget.

In addition, only 30 out of the 96 condo units had pre-sold thus far. With the economy slowing and shrinking the already-thin luxury consumer market, it was extra important to satisfy the customers that had already signed up, to improve word-of-mouth advertising.

However, customized designs requested by the condo owners continued to present additional problems, and many customers were very particular about the details of their luxury condos. For example, one owner hired an interior designer that proposed a few simple, but critical, changes. Some seemingly-minor changes, such as a change of kitchen cabinets or re-orientation of the bathroom doors, ultimately cost a lot due to additional work to coordinate new design details or due to major changes to base building systems, which potentially delayed construction beyond the condo unit; these changes were not "minimal, not disruptive to hotel guests or other condo owners" (pg 4), as Hodgkins had hoped. Some customers canceled their design changes upon learning the true cost, which further frustrated the architect and general contractor, who still had to pay for the work to coordinate the design details and provide a cost estimate.

Analysis

Based on the progress above, there are three key decisions that could have reduced conflicts on the project.

First, Hodgkins could have followed Farley's recommendation to have a total of 72 condo units instead of 96 condo units, the maximum allowed by the Boston Redevelopment Authority. Now, we know that only 30 of 96 units had pre-sold. Even beforehand without that knowledge, they could have anticipated that their target audience was quite small to begin with. In such a thin market, the risk of having unsold units was probably greater than the risk of being unable to meet an unexpectedly high demand. Also, since this was the owner's first time building a condo development, it would have been a good idea to keep the scope limited and to listen to the condo marketing expert that they had hired (Farley). Additionally, based on the proposed design changes (Exhibit 2, pg 11), it seems like the door re-arrangements were chosen to make more space in the den and other rooms; perhaps there would have been fewer design changes had the base condo layouts been more spacious, which Farley may have anticipated. It is possible that Hodgkin's decision was influenced by the KDC's advice to build 96 units, since KDC already had

a strong relationship with the owner and may have had a strong fiduciary relationship as the architect to the owner throughout the initial concept design process.

Second, they could have built-in a hard limit on the types of details and design changes that customers could have requested; for example, they could have limited the scope of design changes to cosmetic changes and excluded any major electrical, mechanical, plumbing, HVAC, or fire safety systems. In an effort to demonstrate their high commitment to customer service, the Regency Hotel Group prioritized enabling broad customization of the condo units by customers. However, they were not prepared to fulfill this commitment, and just "hoped that changes would be minimal, not disruptive to hotel guests or other condo owners" (pg 4). In practice, any major changes that would have affected the base building electrical, mechanical, plumbing, or fire safety systems threatened to delay general construction progress by up to two months. This forced the owner to choose between major delays or customer dissatisfaction. The owner didn't account for potential delays due to design changes when they negotiated for a faster schedule during the bid process.

Furthermore, had the owner chosen to commit the time and cost of accommodating customers' design changes, it could have chosen a different project delivery method that could better accommodate design changes. In particular, any project delivery method that emphasizes the relationship between the owner and the general contractor, or at least involves the general contractor and the customers' architects earlier in the process would allow them to better coordinate the design customizations and specifications.

Recommendation

In order to assess which project delivery method would have been most appropriate for this project, we must first determine project, owner, and market drivers to narrow down options.

The most important project driver for the condo development is the need for more flexibility and involvement in the design process. Unlike the hotel design, there was the option for customers to request modifications to the default condo layout, including changes such as additional power outlets that required planning early on in the construction to avoid re-doing significant amounts of construction. Although permitting was not an issue in this case study – possibly because the owners involved the Boston Redevelopment Authority early on in the conceptual design discussion – if there were any uncertainty about the ability to obtain permitting, this would have just increase the need for a flexible project organization.

The need for more flexibility limits the set of appropriate delivery methods to general contractor (reimbursable), construction manager, multiple primes, design-build (reimbursable), and turnkey (reimbursable). A key distinction is that any

method with a fixed price contract is a bad option when more flexibility is needed, since there is so much uncertainty with the final scope and price.

A few owner drivers are important in this case study. First, the owner had little experience, or construction sophistication, in the specific business of luxury condo development. This differs from luxury hotel development – their main line of experience – in both the design and the operation of the space. Second, the owner had low in-house capacity for design work and quality assurance, so they relied on hiring external architects (O'Brian and Sinclair) to coordinate the customer design changes, which cost more time and money than the owner was planning on spending. In spite of the low capability, the owner wanted to remain involved and maintain control over the project, since construction affects the operations of the luxury hotel and amenities.

With this combination of medium owner sophistication and medium-high owner capabilities, this suggests that of our set of appropriate methods, a general contractor is the best option. Arguably, design-build and turnkey might also be good options if the condo marketing consultant could supplement the owner's luxury hotel development experience enough to increase the owner's sophistication.

Finally, the major market factor was the state of the target audience: wealthy couples in the late-middle age. Because this is a niche audience that is sensitive to economic downturns, the owner had an interest in either picking a project delivery method that was either flexible enough to survive market uncertainties or fast enough to sell condo units before any negative market fluctuations occurred.

Ultimately, given these factors, I would have chosen a general contractor due to the appropriate mix of owner sophistication and owner capabilities. In this case, the Regency Hotel Group had also originally considered a few different payment options to control cost, but all for a general contractor delivery method, so perhaps this is the option that they were most familiar and most comfortable with; in general, the use of a general contractor is most familiar by all contractors and courts, and case law already exists for dispute resolution for this project delivery method.

However, I would have chosen a general contractor working for a reimbursable – rather than a fixed – price, and with a guaranteed maximum price. This non-fixed price allows for some changes to the design documents in between selecting the contractor and selecting the subcontractors, and this could better accommodate potential customizations earlier in the process to reduce last minute change order costs. The disadvantages of less price accountability and unknown final costs are less important since the condo owners agreed to pay for the cost of additional design changes; in fact, "many of the early buyers had made extensive revisions to their units ... spending significant amounts of money to rip out existing work" (9), so buyers were definitely able and willing to afford the extra cost. The guaranteed maxed price addresses the Regency Hotel Group's risk aversion and desire to control the price throughout the project.

Furthermore, I would have awarded the contract based on qualifications rather than price, given that the luxury condo development work was more of a specialty design than a commodity design. It may have also been worth given the bidders a separate score for their hotel development bid and for their condo development bid to emphasize how these different parts of the project had different design requirements and flexibility needs. The general contractor could be then chosen based on the combination of those two scores. Note that hiring two general contractors (the multiple primes technique) would have been too difficult to balance, since this introduces potential for the two sets of workers to get in each other's way during construction and other conflict between the two general contractors. It also requires the owner to be more involved and knowledgeable than the Regency Hotel Group could have been in this project.

Instead of negotiating for the general contractors to cut down the construction schedule while negotiating bid adjustments, I would have negotiated to establish favorable terms for handling change orders. At the very least, this establishes an avenue for working with the contractor on changes, rather than setting an expectation by the general contractor that there would be "minimal changes" (3) to reach a tight deadline.

Conclusion

Although any project allowing customization after the design phase can be tricky to handle and to control price and scope, there are better project delivery methods that can provide the flexibility needed while ensuring that the total price for the owner does not end up much higher than originally expected. Awarding a bid to a general contractor working for a reimbursable guaranteed max price is one such option that could have made this project go more smoothly for the parties involved. Ultimately, this project was difficult for Hodgkins, O'Brian and Sinclair, and Kelly Construction because the owner the Regency Hotel Group wanted to accommodate a high volume and range of design changes that none of these parties had expected to receive nor was well-equipped to accommodate based on the originally chosen project delivery method and contract.