

Information and Advice for Commercial Industry Leaders

— by Scot Hennon

Running a construction project is like coaching a football game. When you develop a good game plan, effectively impart the intricacies of the plan to the team, and the team executes the game plan precisely, the results are impressive. For an architect, the equivalent of a win in the NFL is the production of a quality building, delivered on time, on budget, with all of the design goals fulfilled — creating a satisfied client.

The keys to a successful project — much depends upon the client

Like a football game, however, there are many elements that can disturb the best laid plans. To be successful, a construction project requires precise scheduling, superior teamwork by all parties, and open, consistent communication between the client, architect, general contractor, and subcontractors.

While design and construction professionals are obviously key players, clients also play a critical role with their decision-making responsibilities. Clients that make timely decisions, and stick to them as much as possible, put their architect and GC in the best position to deliver a highly successful project.

Why is this so? The answer can be best explained by providing some background on how a project unfolds. The following are the key steps in a typical design-bid-build project:

Schematic Design

This is the framework of the design. It includes the basic parameters of the project, such as dimensions; design aesthetic; and types of structural, roofing, and exterior finishings to be used. The decisions made during this stage are crucial to what happens in the succeeding stages. While the client need not make every approval decision at this stage, the closer to 100 percent of approval decisions made before the next stage — design development — the better the odds that the project will succeed.

Design Development

A "final draft" of the design is the deliverable of this stage. The exact layout of the building, its electrical and mechanical systems, lighting, and other specifications are all included. The client should make all major decisions about what will go into the finished product during this stage. A few secondary or tertiary decisions may be left for later, but if any major decisions are left undone, the ramifications could be schedule delays, budget overruns, or maybe even worse, a building that does not meet the original goals.

Construction Contract Documents

These drawings are what the GCs will base their bids upon. It is crucial that these documents contain all design specifics so that the GC can submit a reasonably accurate and competitive bid. These documents include all dimensions, standards, criteria, and regulations that impact construction. Incomplete construction contract documents can lead to higher bids because contractors have to build in a cushion on the bid to account for unknowns. For example, the documents should specify the grade of steel and how it is manufactured, otherwise the contractor cannot obtain accurate pricing of this critical material.



Bidding and Negotiation

At this stage, the architect reviews the GCs' bids and vets their qualifications. The architect assists the client to choose a qualified GC that can deliver the project within the budget. The architect may also assist the client in negotiating pricing, scheduling, and other construction specifics.

Construction Administration

The architect observes the work in progress as the client's representative, and ensures that the GC delivers what is represented in the design drawings. The architect resolves any misunderstandings that the GC or its subcontractors may have about what is to be constructed. The architect also reviews applications for payment so that the contractor fulfills its obligations before being paid.

As you can see, the architect's responsibilities go far beyond drafting of the design documents. Decisions made during the design stages impact bidding and construction administration in many ways. Furthermore, the work of the architect and GC depends greatly on the client signing off on a host of design decisions at the appropriate time on the schedule.

Delay of Game

When a client delays making critical decisions, it hamstringing the architect and the rest of the project team. Delays and late changes to plans can hinder the architect and project team from giving the client the best product at the best price.

Developer X delays a final decision on the type of Exterior Insulation & Finish System (EIFS) as Contractor Y tries to convince X to change the original plans from a light gauge metal framing system to a tilt-up concrete system. This change, the contractor claims, will save weeks on the construction timetable and save a significant amount of money. After a few weeks of consideration, X decides to go with Y's suggestion.

What X doesn't realize, however, is this change, because it is so late in the process and impacts multiple aspects of the structure, will require the architect to revise about 25 percent of the construction documents. This is no simple task, and most of the time that was to be saved during construction is eaten up by the extra design work. As a result, the overall project timetable turns out to be no faster than projected in the original plans, and the price of concrete suddenly shoots up. In the end, the amount of money saved as a result of the 11th-hour EIFS design change is far less than what the contractor promised. Worse, the finished building isn't what the client had in mind during the design phase, as the façade is somewhat non-descript as compared to the original plan.

While there are rare instances when very late design changes are truly necessary, clients should keep in mind that these often have wide-ranging impacts on the overall design. It's like a football game plan — if you change from a running game to a passing strategy, you can't just change what the quarterback is doing. Everybody else on offense has to support the new strategy or it will fail. In a construction project, everybody, including the client, has a crucial role that impacts the work of everybody else, and ultimately, of the whole project.

LEARNING MORE ABOUT THE DESIGN PROCESS

Construction projects are lengthy, complicated endeavors. This issue's main article is a good primer on the process, but there is much more to say on the topic. For more information on, guidelines about how the design process works, and how clients and architects can interact optimally, visit these informative sites:

AIA—How Design Works for You
<http://howdesignworks.aia.org/>

AIA—Getting Started
http://www.aia.org/pub_yaya_gettingstarted

20 Questions to Ask Your AIA Architect
http://www.aia.org/ask_20_questions

UPCOMING EVENTS

ICSC RetailGreen Conference & Trade Exposition
September 15–16, 2008
Addison, Texas

METALCON International
October 1–3, 2008
Baltimore, MD

ICSC Mixed Use Conference
November 11–12, 2008
Chicago, IL

ICSC CenterBuild Conference
December 3–6, 2008
Phoenix, AZ

National Retail Federation Annual Convention & Expo
January 11–14, 2009
New York, NY

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About Hennon Group

Hennon Group Architects (HGA), based in Mooresville, North Carolina, is a full-service architecture and interior design firm that provides retail and commercial design services nationwide. The firm specializes in upscale factory outlets, big box stores, and neighborhood centers.

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