

# CHANGES DURING CONSTRUCTION

## UNDERSTANDING AND CONTROLLING THE INEVITABLE

By Kurt Williams

**CHANGE ORDER.** The strongest individual quivers at the mere mention of those budget-breaking words. It is rare that any project is built, from start to finish, without some change in the original plan, despite the best intentions of all the involved parties. A change order is a written agreement between the owner and the builder to add to, delete from, or otherwise alter the work that was established in the original building plans and specifications. A change order is the legal means for changing the original contract between the owner and the builder. No matter the reason for the change, the result creates headaches for all. In addition to the headaches, changes can cause the builder to lose momentum on the project resulting in lengthy delays and the missing of critical scheduling milestones. What may seem like a simple change can be a very costly and time consuming issue. Change order work can cost 10 percent to 15 percent more than if it had been included in the original plans. These increases in cost result from pricing the work in a non-competitive environment, scheduling impacts, and the excessive paperwork and distraction that the builder experiences to facilitate the change. There are three primary categories for change orders: change in scope, unforeseen conditions, and errors/omissions.

### Types of Change Orders

Changes in scope are typically requested by the owner to modify the facility to better accommodate new ministry demands or ministry changes. With as much effort that is invested in pre-planning, the space sometimes does not look the way that you thought it would look once the “bricks

and sticks” are in place. Changes made earlier cost less. Changes made during the actual construction get expensive.

Unforeseen conditions are situations where the builder discovers physical or plan challenges that make it imprudent or impossible to follow the original building plans. Examples of unforeseen conditions would be unexpected soil conditions, the discovery of buried material like old homes, fuel oil tanks, even cars, and weather conditions and weather damage.

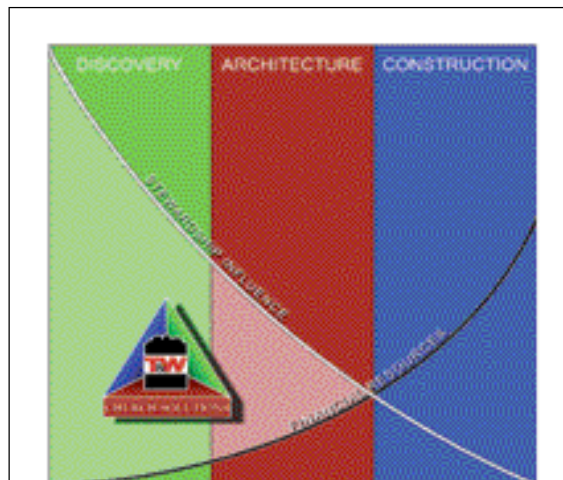
Errors and omissions are situations where the original plans and specifications have been incorrectly drawn or represented. The result of this situation can be extremely costly, if not caught soon. The builder should be looking at the plans from the start to ensure that design errors and omissions are minimized. Design professionals should carry insurance to compensate the owner for these types of changes.

Few projects are built today without at least one of the three types of change orders taking place. The frequency and magnitude of the change orders can be greatly reduced

by protecting yourself in three key areas: pre-planning, risk management and change order management.

### Pre-Planning

Every dollar spent planning saves at least one hundred dollars in future problems. The cost/influence curve (refer to graph) clearly shows that when you are investing the least amount of resources (the line that starts in the bottom left corner and climbs to the upper right) you actually have the most impact on the project (the line that starts in the upper left and descends to the bottom right). The area between the



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two lines is where teamwork and pre-planning takes place. You, the designer, and the builder must be collaborating at a high level to ensure that all three of the change order types are eliminated, or at least greatly reduced.

The time invested together as a team will do several things: create camaraderie within your team, build positive relationships that will facilitate open and transparent communication, and, lastly, will give all the team members the comfort level to be brutally honest about various project concerns. When these things happen, pre-planning is successful, and the church saves money.

Another important pre-planning item to address is a thorough review of all contract documents. Contract documents include the building plans, the specifications, the designer's contracts, the builder's contracts, and any other professional agreements. The various documents must be in harmony, particularly, the designers and builders contracts. The designer may want to use an AIA (American Institute of Architects) contract, and the builder would like to use an AGC (Associated General Contractors) contract. At first glance they look similar, but in a contract situation it is difficult to cross between the two different types of contracts. Choose the contract that you, the owner, feel the most comfortable with and have your entire team use the same format.

### Risk Management

In some instances, builders who are the low bidders may try to increase their profit margin through the change order process. It is a practice in the industry to find every error and omission in the designer's plans, prior to the beginning of construction, and then "stumble into" the discovery of the discrepancy with a change order as the only solution to the problem.

The most prevalent form of risk management, outside of contracts and attorneys, is how the project is contractually delivered. There are several contractual approaches that a church may take today. The most important element is the timing, interaction and integration of all the team members on the project (refer back to the cost/influence curve). The sooner that the designer and the builder are working together, the more likely you are to have lower costs on your project and the less likely you are to have expensive change orders due to the early buy-in and ownership of the project that has been fostered between the team.

Remember TEAM stands for "Together Everyone Achieves More." Put your TEAM to work for you sooner and have them manage the risk that the church would otherwise have to manage. Because change orders tend to happen, make sure that the contract with your designer and your builder stipulates a fixed fee or percentage for changes and that all associated costs involved with the change are open for you to review.

### Change Order Management

Builders are typically delighted to meet every request for a change that the owner offers, from moving a wall to changing an outlet location to adding a drinking fountain. What may seem to be "minor" changes become very expensive when controls are not in place to manage this situation. Change orders happen; make sure that you are prepared.

The first step of good change order management is to have a point person for the church. The point person is the only one who has the authority to ask for or approve any changes for the project. A change that takes place on the project without the signature of the point person is not a valid change.

A good change order (if there is such a thing) should actually begin as an RFC, a request for change. The owner would submit an RFC to the builder in the case of a change in scope. The builder would submit an RFC to the owner in the case of an unforeseen condition or an error or omission in the plans. An RFC is not an authorization to do the work. It is a serially numbered document that identifies a possible change in the project. The RFC would be dated and signed by the submitting party and is used primarily to indicate that there is a situation that needs to be rectified by a change order.

The result of an RFC is a PCO; a proposed change order. A PCO would include the cost of the change, the number of schedule days that the change will take to complete and any other options that might be available to the owner. Finally, the PCO, if approved, becomes a CO, a change order. A change order is an amendment to the construction contract. The change order should be signed by both the owner and the builder, dated, and immediately accounted for in the billing summary.

Change happens, but you can proactively minimize the impact and the number of change orders on your project by addressing a few areas in the process of designing and building. Surprises are really only fun at birthday parties, not in the middle of a construction project. Managing the change order process for your church is good stewardship of your precious funds, keeps your project running smoothly, and keeps your project on schedule. ❖

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