

Change Orders Block 2 – Is This Really a Change?

An Online Continuing Education Course for Engineers

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Change Orders Block 2 – Is This Really a Change?

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CHANGE ORDERS BLOCK 2 - IS THIS REALLY A CHANGE?

COURSE DESCRIPTION

Contracted Work should be provided as shown, if possible.

When it is alleged that a change order is required, a change order may or may not be appropriate.

The first question is this: "Is this a clarification or a change?"

If a change order is necessary, what is the reason for the change?

PERFORMANCE OBJECTIVES

Understand where change orders fit into a typical construction process.

Determine whether an alleged need for a change order requires a clarification or a change order.

If a change order is necessary, determine the reason for the change.

Avoid allegation that the Architect or Engineer has error or omission. Educate the Owner why "helping" may actually introduce costs.

INTRODUCTION

Change Orders change the contract time, cost, material or method. Change orders are inevitable. However, sometimes a Contractor wants a change order for work which is already shown in the Contract Documents. In this event, a Clarification explains the location of that work in the Contract Documents.

There is a method to determine whether a change order is necessary. If a change order is found to be necessary, there is a method to determine the reason for the change.

An Owner or Contractor can easily allege that a change is caused by error or omission on the part of the Architect or Engineer. Avoid an erroneous allegation that the Architect or Engineer has an error or omission for reasons of reputation, liability and cost.

If a change order is required, an Owner may want to perform some of the work to save cost, but the Owner "helping" may introduce costs. A list of questions may cause the Owner to realize the hidden Owner costs associated with "helping".

CONCLUSIONS

Determine if an item is already in the contract . If so, issue a clarification, not a change order. If a work item requires a change, determine and record the reason for the change.

At the end of construction, most Owners want an accounting. It is easy for a Contractor or Owner to allege that the Architect or Engineer has a design error or omission. Most reasons are other than error or omission.

The Architect and Engineer are wise to maintain a change order log or an equivalent record of the changes and their reasons, from their perspective.

If an Owner wants to participate in the construction to save cost, encourage the Owner to consider the hidden costs.

#2A IS THIS A CLARIFICATION OR A CHANGE?

It is desirable to have a clarification instead of a change order.

What is a “clarification”? The Architect or Engineer elucidates, makes clear, and removes doubt that the work is already shown in the contract documents.

What is the outcome of a clarification? Since the work is already shown in the contract, the Contractor is responsible to provide the work without a change order.

TYPICAL REQUEST FOR A CHANGE ORDER

A request for a change order may originate from the Owner, Architect, Engineer, or Contractor.

Why would someone request a change for work already shown? Some reasons are as follows.

- It is possible for a Contractor to overlook contract document work items. The contractor has the bid “take off” person, a field supervisor, the electricians, and helpers. Each person handles the contract documents for a short time for specific purposes but none memorize them.
- An Owner, Architect or Engineer may perceive a “better way” than that shown.
- Someone may correctly perceive a problem with the work as shown.

The Owner’s first question tends to be this: “What does it cost, and who made a mistake?”

However the question should be this: “Is this REALLY a change or is it a clarification?” Is the work already shown anywhere in the Contract Documents, possible to construct as shown, and will adequately function as shown?

- If yes, then issue a Clarification indicating the contract document location of the work.
- If not, then issue a Change Order proposal containing the reason, description, and estimated monetary/time cost for the change.

CONSIDERING YOUR RESPONSE TO A REQUEST FOR A CHANGE ORDER

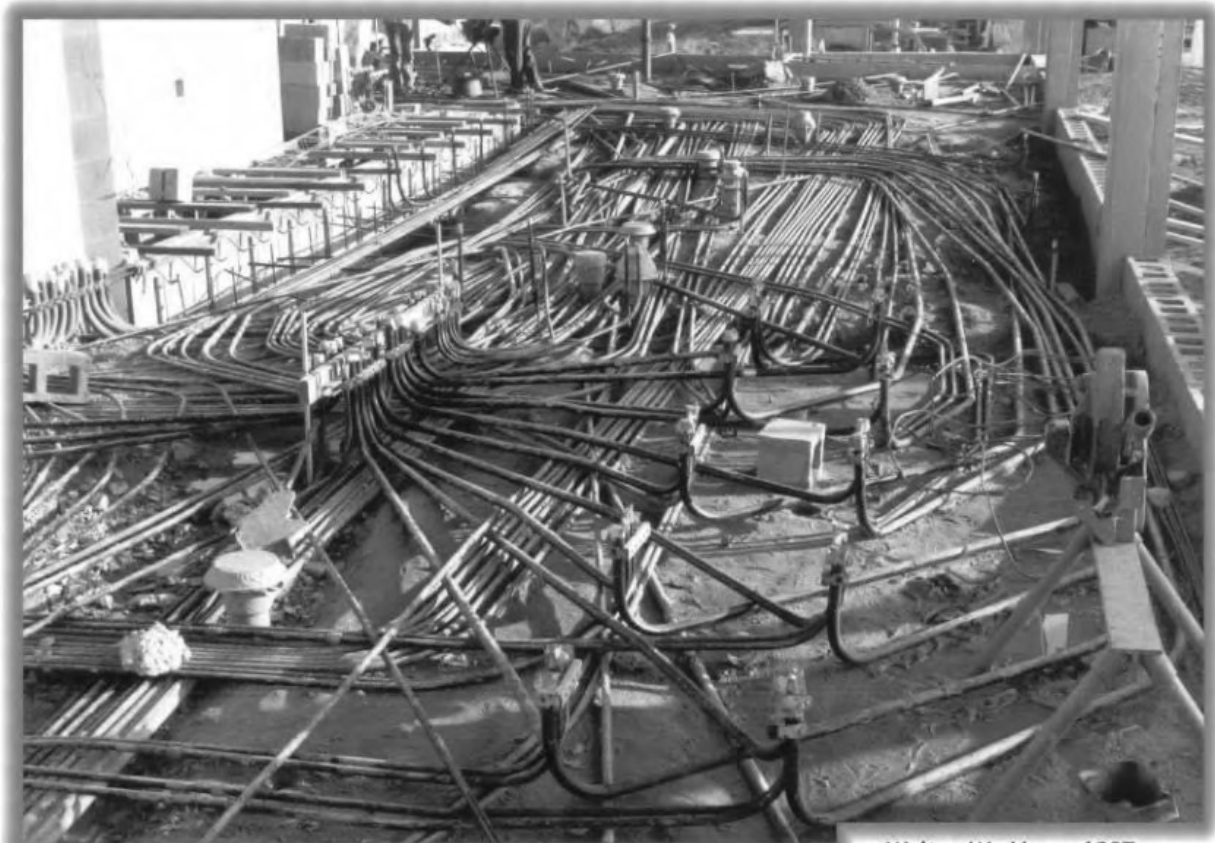
Consider your response; give no quick answer. Let's say that you are on the jobsite or at a meeting. The Owner or Contractor makes it obvious that a change order is required, and asks you to agree. You feel under pressure. You think that you know exactly what to say. However you say "I will research this and get back with you. I want to consider this." They will experience a higher level of trust in your reply since they perceive that you will give the question due consideration.

RESEARCH THE CONTRACT DOCUMENTS

The Architect or Engineer should study the contract documents. Often the work IS shown. However people forget what is shown, where it is shown, or how it is shown due to the passage of time and due to the large amount of information. Also, the Architect or Engineer should study the contract documents because the Owner depends upon their Architect and Engineer to advise.

- Research the contract documents of your discipline. Remember to review the addenda. At times the Contractor overlooks the addenda which addressed this situation already.
- Review previous change orders. If the work is in a previous change order, the Owner certainly doesn't want to pay another change order for the work.
- Speak with your supervisor or principal-in-charge for their experience. They have experienced "chunks taken out" over the years. As it has been said, "Good judgment comes from experience, and experience sometimes comes from poor judgment." Hopefully, some good judgment can come from wisdom without having the negative experience.
- Sometimes an Architect or a mechanical engineer shows electrical work clearly enough that "something" is obviously required, and should have been bid, even if some details are omitted. Study the contract documents of the other sections of the work. Speak with the Architect and with the engineers of the other disciplines.
- Formulate your written response. Include reference to the contract documents or applicable codes. Typically the Owners and Contractors have accepted such a document in a positive manner.

In one case an Architect insisted that I confess to him that I obviously omitted some work. He said that I should quit "hedging" so that he would trust my word. I replied that he knows that I try to be truthful with him. However it is not perfectly clear to me that this is an omission. After I research this I will be truthful with him about the results. In that case I found that the item actually was missing. My confession consisted of a Request for a Change Order Proposal with the reason for the change stated therein, according to due process.



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The change order for conduits in the sludge press building required extensive meetings and lists. Which conduits remain, which are deleted, and which are added?

CASE STUDY

The DDC Supplier request for a change order was rejected by the mechanical engineer, so he tried the electrical engineer. During design, the mechanical engineer and I, the electrical engineer, coordinated the locations for DDC control panels. I designed 120 volt circuits to them. After the bid, the DDC supplier located the DDC controls panels wherever they wished.

This had occurred before, causing change orders to relocate the 120volt circuits. For that reason the mechanical engineer had specified " provide conduit and conductors and power supplies and transformers to extend power to all supplemental control units." The mechanical engineer told the DDC supplier "No change order- provide as specified". So the DDC supplier sent a request for a change order to the electrical engineer (me). I didn't realize that the mechanical specification covered it. I almost wrote a request for a change order proposal. I did discuss the matter with the mechanical engineer, who referred me to the correct specification section. The mechanical engineer re-iterated his response to the DDC supplier.

SOME INTERPRETATIONS OF CONTRACT DOCUMENTS

Some items such as circuiting require three documents for a complete description: plan drawings indicate lengths, riser diagrams indicate connection, and panel schedules indicate description. If an item is shown in one or two of the three places, that much description may adequately require the item, or may at least reduce the cost of a change order to complete the description.

In one instance a panel-board was shown on a riser diagram and plan, but not scheduled. The Contractor was obligated to provide "something". It will be the specified manufacturer, and will fit the riser's feeder ampacity to meet National Electrical Code. The designer lost the opportunity to detail bells and whistles. But a basic panel was required.

- An item may be shown in a note on a riser diagram and a floor plan.

Conflicts of Information

Hierarchy

A Contractor may request clarification of items shown differently at two locations in the contract documents. This is a conflict of information. Hierarchy of information can be used to resolve the conflict. If an item is shown in one place only. A hierarchy of information can be used to resolve the conflict. In an alleged conflict of information, the higher level information probably has a hierarchy for precedence of information.

1. Specifications,
2. Chart or schedule,
3. Note, symbols legend,
4. Plan layout.

Claim that "We did not bid it":

An item of work was shown differently in two contract document locations. A Contractor claimed that due to the conflict he was not required to provide the item. Our response was that with similar logic he could be required to provide it both ways since it is shown both ways. However, to be sensible, provide it one time as determined by the hierarchy of information.

Adjacent similar information may indicate an item's description

The contractor questioned a line on a classroom building drawing : what is it? The Architect pointed out that a raceway was unidentified; is this a conduit or a cable tray? The Architect pointed out that all other runs on the sheet were identified as 4 inch by 12 inch cable tray. Therefore it was logical to assume that this raceway was the same.

