



The ideal way to build: Design and construct

The success of your project depends on what contract you use

By Genna Levitch, BDS

In previous columns, we looked at “Cost Plus” and “Fixed Price” contracts. A project is considered successful if the building is delivered on time at the appropriate price and quality level... and the client is satisfied. One of the main influences on these outcomes is the method of procurement. This final column in this series looks at Design and Construct, a popular option as the contract price is fixed at an early stage and the builder takes on some of the risk of any price increase. To balance this, the builder is also the designer so he can reduce some of the risk of a price increase by redesigning or re-specifying the building.

3. Design and Construct (D&C) contract

This contract addresses the limitations of a Fixed Price contract, which cannot provide a building cost until late in the project. Many practitioners are reluctant to embark on a project without some certainty about the budget.

D & C companies arise when a building company adds design to their expertise or an architectural firm decides to provide building services. They are then in a position to offer a global fee for all the work from beginning to end. You as the owner supply a basic brief to the contracting organisation that then designs, documents,



obtains approvals and builds the project. The advantages of D & C are:

- Greater price certainty for clients as the contractor normally includes a sum for future design development and for risks involved in any unforeseen occurrence. Extras should therefore be restricted to scope changes requested by the client;
 - D & C reduces the risk of cost blow-out as both parties are neatly aligned to avoid changes which could impact on pre-agreed costs and time schedules;
 - D & C provides greater control over spending as the contractor is bound to a maximum price; This alerts the team to any potentially expensive items of design development; and
 - D & C aligns the contractor with client and consultants encouraging team work with mutual trust and common goals. Less administration is required as changes are limited; there is quick settlement of the final account.
- In many cases, providing peace of mind is an important element, as the price in a



D & C contract can be established at the outset. But it takes some trust as the D & C company has offered a price before any design has been done. If the company has basically a building background, it may put a minimum into design as design is seen as means to an end, with little intrinsic value. The result could be a well-built, but poorly thought out and designed building. Conversely an inexperienced design company can 'over-cook' the design, leaving less in the budget for construction. The disadvantages of D & C are:

- The client might pay too much as the contractor takes on greater risk and thus includes in the price an allowance for design development and risk. A competitive price should not be sacrificed in lieu of appointing a contractor early;
- Contractor's with design and build experience may have useful knowledge. However, it may not prove particularly appropriate as in those situations the contractor has clear control of the design consultants and the scope of information produced;
- There is no standard form of contract for D & C so there is a greater possi-

bility of errors and misunderstandings of liabilities between the parties that may result in conflict;

- Scope changes always add to the cost but often less than traditional contracts as all parties are watching costs and variations closely.

To ensure the projects' success the following are recommendations to adhere to for D & C contracts:

1. Clarity of the scope is critical. The client should sign off the brief at appropriate stages. The design team must clearly know what is required. Scope changes should be avoided as much as possible;
2. The tender documentation must define exact requirements. Design should be progressed as far as possible and a minimal number of provisional sums included; and
3. Provisional allowances and unknown items should be defined in the contract to show that all areas have been canvassed.

A way that these issues can be managed is by establishing a preliminary budget (see Parts 8 and 9 of this series) and then completing enough of the design to get an

actual fixed price for construction. Prime cost items are used to simplify this process. Specific fixtures and fittings such as sinks, taps, tiles, lights, sanitary ware and air conditioning can have an average cost listed against each item as they may not have not been time to complete their selection. When the time comes to approve these items, there may be an upward or downward variation depending on the clients' choice of product availability.

Whilst this concept appears straightforward, in practice, differences in opinion arise as to "what extent the price is guaranteed" and how much control the contractor has over design.

Your knowledge and experience in building will be a major factor in determining which way you will choose to go. If you have not built your own home and are unfamiliar with the design, approval and building process, it would not be safe for you to embark on a building project on your own. You will not be able to anticipate and avoid all the pitfalls on your first project. What you don't know will probably cost you in time and money. In this case a D & C contract could be ideal as it gives you a price up front and requires very little management on your part.

The ideal combination is a D & C contract where the architect or designer put the completed plans out to tender and then supervise the construction. That way the company which has designed the project for you, ensures you get the keenest price without compromising the quality of the finish. Having the one company follow this through from beginning to end is the only way to maintain continuity and responsibility for the finished product.

A successful project not only comes in on time and budget, but produces a purpose and well built practice with an environment that supports you during your working day, while attracting patients by its ambience and its ability to project the quality of clinical work you offer.

About the author

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