FIXED PRICE CONTRACTS AND THE ALLURE OF DESIGN & BUILD

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1. INTRODUCTION

The issues we discuss today are not new. In 1760 BC, nearly 4,000 years ago, Hammurabi, King of Babylon, set out the laws of construction in five rules:

1.1. If a contractor builds a house for a man and does not makes its construction firm and the house which he has built collapses and the causes the death of the owner of the house, that contractor shall be put to death.

1.2. If it causes the death of the son of the owner of the house, they shall put to death the son of the contractor.

1.3. If it causes the death of a slave of the owner of the house, he shall give to the owner of the house a slave of equal value.

1.4. If it destroys property, he shall restore whatever is destroyed and because he did not make the house which he built firm and it collapsed, he shall rebuilt the house which collapsed at his own expense.

1.5. If a contractor builds a house for a man and does not makes it construction meet the requirements and a wall falls in, that contractor shall strengthen the wall at his own expense.

Even 4,000 years ago, the risks inherent in building were recognised and sanctions imposed if those risks were realised.

Risk is inherent in any construction project. The lawyer's role is to describe what the parties have agreed to, and to allocate responsibility for the risks that the parties identify.

Of course, contracts are slightly longer than the 5 rules of Hammurabi that governed the building trade by the waters of Babylon. The allocation of risk now involves not only the contractor and the employer, but the various elements of the design team, and in the back ground the all- important insurers.

This note shall consider briefly the allocation of risk in the context of the traditional form of contract, and then examine what is meant by a fixed price contract in that context, and finally look at the attractions of a design and build approach.

2. YOU GET WHAT YOU CONTRACT FOR

A great deal of dispute turns on differing expectations of what the contractor has been asked to do, and failing to understand that the contractor is only obliged to carry out such works as are specified or reasonably to be implied from the contract. If the contractor is asked to do anything else, he is entitled to treat it as a variation.

However, the difficulty with the traditional form of contract is that there is an advantage to the contractor in using errors by the design team to build up a claim, rather than in drawing those errors to the client's attention before the contract is signed.

Inexperienced employers fail to understand the dangers of proceeding to contract on the basis of inadequately prepared plans, and they are wide eyed with amazement when bills from the contractor arrive.

A contractor calculates his price on the balance of risks he is required to take. If the contractor is required to shoulder risks which are usually borne by the employer one of three things must happen:

- the design will have to be altered,
- the risk will have to be bought off with insurance, or
- the contractor will have to raise his price to cover the cost of dealing with that risk.

3. ALLOCATION OF RISK UNDER A TRADITIONAL TYPE CONTRACT

The most important contractual risks that are thrown upon a employer under a traditional type of contract are as follows: –

3.1. Variations by the employer

Of course, if a employer changes his mind and requires a modification to the building it has designed, it can expect to pay handsomely.

3.2. Variations by the architect

The architect is entitled to give directions to the contractor. However, if that direction amounts to a modification of the design, quality or quantity of the work, or addition or substitution of any work, this will be treated as a variation. In practical terms, it is never possible to have plans completely prepared prior to contract. There will always be a need for elaboration of detail or for clarification of interpretation. A fertile field of dispute will commonly be whether the architect's directions are an amplification of the design, the cost of which is borne by the contractor, or a modification, the risk of which is borne by the employer's purse.

3.3. Wage and price fluctuations

This allows the contractor to vary the contract price if wage rates or prices of materials and goods go up.

3.4. Loss or expense not contemplated by the contract

If complying with the architect's directions involves the contractor in loss or expense beyond that provided for or reasonably contemplated by the contract, the loss or expense is added to the price. Unforeseen ground conditions will be an example, where the additional cost of the building as a result will be the employer's burden. Naturally, a contractor will be tempted to argue that the conditions encountered were actually unforeseeable. The employer (and his experts) will tend to have the opposite view.

3.5. Legislative changes

If the costs of carrying out the works increases or decreases because of any legislation or exercise of legislative power, the contract price will be adjusted. Hence the lack of rejoicing at finding rare protected snails or the mummified remains of Viking raiders.

3.6. Delay

If there is a delay by the employer in giving possession of the site, or if the employer delays the progress of the works, the contractor is entitled to compensation. This manifests itself particularly if there is tension between the design team and the contractor, and the contractor can point to tardiness on the part of the design team in delivering building plans or giving necessary decisions.

3.7. Events beyond control

Delays due to force majeure, exceptionally inclement weather, civil commotion or industrial action, or inability by reasons beyond the contractor's control to get labour or materials will result in an extension of time for the carrying out of the works.

4. FIXED PRICE CONTRACT

When the developer tells you he has secured a fixed price contract for the construction of a block of apartments or a factory, what does that mean? Unfortunately it can mean a wide variety of things.

4.1. Not a measured contract

Contracts can be divided into either lump sum fixed price contracts where a contractor is obliged to provide a set quantum of work for a set price or a measured contract. In a measured contract, the contract is based on agreed rates, which will then be applied to the quantum of work actually carried out.

4.2. No wages/price fluctuation

Commonly, it is also taken to mean that the Labour and Materials Costs Variation clause has been deleted. In most cases, where the contract is well managed on behalf of the employer, this will be sufficient.

4.3. Not guaranteed delivery

However it does not mean that the building will be delivered on time for the fixed price. The use of the language "fixed price" or "fixed price lump sum" does not mean that the contractor has agreed to bear the risks of ground conditions, of legislative changes, events beyond his control or indeed of differences of interpretation of the design.

These are risks which, (other than the design risk) are not necessarily assumed by a contractor under a design and build contract either.

5. DISPERSAL OF RESPONSIBILITIES IN TRADITIONAL CONTRACTING

5.1. Responsibility divided between various designers and contractors

One of the main disadvantages of the traditional form of contracting is the dispersal of responsibility between the design team on the one hand and the contractor on the other, and then between the members of the design team themselves. This dispersal of responsibilities can give rise to

significant confusion and messy disputes during the course of the construction and even more powerfully if things go wrong.

5.2. The blame game

Everyone blames someone else. The task of sorting out the mess is not assisted by the fact that each of the players is retained under separate contract, but with significant overlap in terms of limitations on liability.

5.3. Attraction of one-stop

In Hammurabi's time, if the building fell down the contractor lost his head, even the fault lay in the design of the building and not in its execution. He was responsible for designing the house and getting it built. The perceived complications of the traditional contract and the escalation of costs have lead to a renaissance of interest in a form of contracting that would have been familiar to our Babylonian forbears.

6. WHAT IS DESIGN AND BUILD?

6.1. Straightforward D&B

Under D&B arrangement, the contractor takes the responsibility for the design of the building and the execution of the works, rather than relying on designs produced by independent designers all engaged under separate contracts.

6.2. Develop and Construct

Where the advantage of having one point of responsibility during the construction stage is desired, but the employer requires a deep involvement in the design, a mixture of the traditional and the D&B approach might be considered.

Under this arrangement, the design team is engaged by the employer and they prepare detailed designs and get planning permission. At this stage, the D&B contractor is engaged to execute the works, according to the design. It will be very important in these circumstances to have the contractor involved at an early stage in the design process. Otherwise there may be differences of interpretation of the design, resulting in conflict and the contractor will not accept responsibility for the design.

Once the D&B contract is signed, it will be for the contractor to interpret and develop the designs. The employer will not be entitled to make any further design decisions without exposing itself to claims for Changes.

6.3. 30%/40% of the UK construction market is now done on D&B contracts.

7. IMPORTANCE OF EMPLOYER'S REQUIREMENTS

No one designs without a brief. Fundamental to a D&B contract is a statement of the employer's requirements.

At its most minimal, this will be a list of performance criteria relating to the activities to be accommodated and the functions to be performed.

If the employer wants to make a choice between various standard designs, the employer's requirements may contain an outline design, which will set out plans and elevations, functional requirements and performance specifications. These methods are suitable for standard buildings. Research in the UK shows that the best results in terms of lowers costs and shorter construction times arise where the employer is prepared to proceed on the basis of a minimal statement of its requirements.

Inevitably this does not result in buildings of great architectural merit, of exceptional quality or of original design.

8. CHALLENGES IN D&B

8.1. Design responsibility for employer's requirements

If the employer's requirements, which form the basis of the D&B contract contain designs prepared by the employer's design team, the contractor may be reluctant to accept responsibility for them. Indeed, the JCT D&B contract in the UK makes it clear that the contractor has no responsibility for designs contained in the Employer's Requirements.

This position, however, would be completely contrary to the main attraction of a one- stop shop. If the contractor is to be required to accept design responsibility for the employer's requirements, there must be an opportunity to familiarise himself with the design and preferably be involved in developing them.

8.2. Fitness for purpose

If you buy a car, there is an implied warranty that it is fit for the purpose for which it is intended. This goes further than a warranty of reasonable care. A motorist is not interested in an assurance that the manufacturer did a reasonable job; he wants to be sure that the car works.

A contractor who designs and builds a building is deemed also to give a warranty that the building will be fit for its intended purpose. However, an architect or other designer acting for a employer in a traditional contract gives no such warranty, but rather is deemed to warrant reasonable care.

It has been argued that a fitness for purpose warranty is essential for a D&B contract, otherwise the contractor has an incentive to "design down" to the minimum acceptable levels of quality, whereas an independent designer has no such incentive. However, at the direction of their insurers, almost all D&B contractors will insist on their liability being confined to that of the reasonable care and skill of an independent designer.

8.3. Pre contractual information

It is very important to clarify the extent to which the D&B contractor can rely on pre- contractual information furnished to him by the employer. For example, if the employer provides the results of a site investigation, or provides other information in its Employer's Requirements, can the contractor treat that information as a warranty or representation? As the contractor will have based his pricing on that information, clear language in the tender and the contract will be required to throw the danger of the information being inaccurate back on to the contractor.

8.4. Controls and approvals

Under the traditional form of contract, the architect is engaged by the employer and instructs the contractor on behalf of the employer. In a D&B (or even in a develop and construct contract) the architect will either cease to have that function, or will be novated over to the contractor and become the contractor's man.

The employer may be concerned, accordingly, that the D&B format will result in less control. Certainly the employer will no longer have a full design team to develop the plans and to protect his interests. All of the D&B contracts, however, contemplate the employer appointing a representative or agent. The employer's agent would have the task of liaising with the contractor or meeting regularly with the contractor and the design team and to give such consents or approvals as are required on behalf of the employer. The agent can be an architect, project manager or quantity surveyor. It is important that such a professional ensures that they are empowered to take the necessary advice of other design professionals if they are faced with an issue in the course of their duties that is outside their professional competence and if they have professional indemnity cover for their role.

8.5. Novation

If the initial design has been prepared by the employer's designer, but the employer requires one point of contact and responsibility for the development of the plans and completion of the work, it would seem sensible that the original design team should carry forward that task under the control of the contractor. This means however, that the designer's relationship with the employer must be transferred to the contractor. The legal trick by which this is achieved is called "novation".

If novation is contemplated, a number of points have to be borne in mind: –

8.5.1. The terms under which the design team are engaged initially by the employer must make specific provision for novation.

8.5.2. If the D&B contractor is expected to make savings in design costs, he will want flexibility of working with his own team or negotiating an appropriate fee structure. This will be very difficult if the design team is being engaged under normal terms of appointment for the entire project.

8.5.3. The design team will no longer be contracted to the employer and thus the employer will not be entitled to rely upon the terms of engagement. The employer will, accordingly, need collateral warranties from the design team.

8.5.4. The employer will no longer have the support of a full design team. The employer needs to hire an agent or representative who will be capable of dealing with the contractor and of pulling in the additional resources that may be required.

8.5.5. The employer has also got to realise that those that he will have regarded as being "his" people will no longer have a primary responsibility to him but will now answer to the contractor. The tension that results from a conflict between established loyalties and contractual obligations can be an unpleasant experience for the design team.

9. D&B

Design and build has been well established in the UK for the last 10 years and is now becoming fashionable here. It is not an answer in itself to the problems of price escalation. It can have advantages in relation to: –

9.1. Certain types of projects involving experienced contractor

9.1.1. Where the employer is clear on what he wants, an

9.1.2. Where the relationship is well managed.

9.2. It does not shift all of the risks on to the contractor. Adopting a D&B approach is a formula for litigation if: –

9.2.1. There is a lack of focus on precisely what is required to be delivered;

9.2.2. If changes are required to the scope of the works;

9.2.3. There is failure to assemble the right design team and contractor;

9.2.4. There is failure to understand the change in relationships that arise and failure to manage the relationship professionally and regularly.

All parties should consider these implications before choosing their contractual route.

The above represents a brief outline of some of the legal issues and does not constitute legal or commercial advice. For further information on the subject, please contact the author, Paul Keane at pkeane@rcmck.com.