

DISPUTE PREVENTION AND RESOLUTION FOR DESIGN AND BUILD CONTRACTS IN HONG KONG

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Summary

The paper starts by examining the Government of Hong Kong's recently published Standard Form of Design and Build Contract and concentrates the analysis on those areas where conflicts usually arise, how they are resolved and how the provisions of the contract deal with these matters. These key provisions, along with the general allocation of the balance of risk in the contract, are analysed in relation to the criteria set out in the Center for Public Resources publication "Preventing and Resolving Construction Disputes". Of particular interest are the provisions relating to the status of the Contractor's Proposals, design responsibility, evaluation of variations and, finally, the dispute resolution mechanisms.

The paper suggests practical ways in which the Standard Form of Design and Build Contract may be modified to overcome the highlighted deficiencies, and improve the potential for dispute prevention and early resolution of those conflicts which arise. Particular emphasis is given to the dispute resolution procedures and the preventative aspects of those provisions. The successful implementation of these procedures in actual design and build contracts, especially in the prevention and resolution of disputes, is discussed in the conclusion of the paper.

Introduction

In May 1992 the Hong Kong Government's Works Branch published its "General Conditions of Contract for Design and Build Contracts" (D&B Conditions). The D&B Conditions were to replace the various ad hoc conditions of contract used by the Works Branch project Departments. These project Departments are responsible for the Government's public works construction programme. The D&B Conditions were regarded by Works Branch as one of a suite of standard form contracts. For this reason, many of the provisions in the D&B Conditions are identical to, or follow very closely, those clauses in the other standard forms of contract. It follows, therefore, that traditional causes of dispute in other Government standard forms are carried over into the D&B Conditions.

Common areas of conflict in construction contracts

The Centre for Public Resources in its publication "Preventing and Resolving Construction Disputes" suggest that the ten most common specific causes of construction dispute are those which appear in the first column of Table 1. The second column of Table 1, give the author's view on how relevant these causes of dispute are to construction conflicts involving the Hong Kong Government. The degree of relevance is indicated.

The remainder of this paper looks in detail at some of those specific causes of construction disputes that are classified as "highly relevant" in the context of the D&B Conditions and with matters associated with design. Particular attention has been paid to the allocation of risk within the contract.

The allocation of risk is particularly relevant as the Hong Kong Government is party to approximately 90% of all civil engineering and a considerable number of building contracts awarded in Hong Kong.

It is therefore in a dominant position in the market place and able, to a large degree, to dictate its own terms

with the contractors. Has this inequality in bargaining power led to an onerous allocation of risk - placing an unfair burden on the contractors? Does this lead to disputes and are the dispute resolution provisions adequate to deal with them?

TABLE 1 Relevance of CPR's Principal Causes of Construction Disputes to Hong Kong Government Construction Contracts	
Center for Public Resources List of the ten principal specific causes of construction disputes	Degree of relevance to Hong Kong Government's Construction Contracts
1. Contract provisions which unrealistically shift project risks to parties who are unprepared to cover those risks.	Highly Relevant
2. Unrealistic expectations of the parties, particularly employers who have insufficient financing to accomplish their objectives.	Little Relevance
3. Ambiguous contract documents.	Highly Relevant
4. Contractors who bid too low.	Relevant
5. Poor communications between project participants.	Highly Relevant
6. Inadequate contractor management, supervision and co-ordination.	Relevant
7. Failure of participants to deal promptly with changes and unexpected conditions.	Highly Relevant
8. A lack of team spirit or collegiality among participants.	Highly Relevant
9. A "Macho" or litigious mind set on the part of some or all project participants.	Relevant
10. Contract administrators who prefer to buck a dispute to a higher level - or to lawyers - rather than take responsibility for resolving the problem at the source.	Highly Relevant

Dispute Resolution Provisions

The contractor is responsible for design under the D&B Conditions. A natural concern for the Government is the adequacy of that design. For this reason there are provisions, (albeit optional at the Government's discretion) for the Contractor to employ a Design Checker "who is independent of the Contractor and of the Contractor's designer to ensure that the design complies in all respects with the Contract". There is no requirement for the Design Checker to be independent of Government. The concept of an independent Design Checker is a positive move and if checks are carried out objectively the system should help eliminate Government and contractor design disputes.

Since 1979 the Hong Kong Government has introduced mediation into the dispute resolution clause of its standard form construction contracts. Mediation, in a somewhat unusual form, is also included in the D&B Conditions.

All disputes under the contract are resolved by a three tier system comprising:

1. The Supervising Officer's (Government's term for the contract administrator) ruling on the dispute, followed if necessary by;
2. A compulsory swift mediation but if the parties cannot reach agreement, the mediator will make his or her own decision which is binding but if disputed is binding only to the end of the Contract whereupon there will be;
3. An arbitration.

The merits of this three tier system dispute resolution system and possible alternatives are discussed below. Before consideration of dispute resolution other provisions of the contract deserve closer examination in the context of risk allocation and the potential for dispute avoidance or dispute generation.

Specific Contract Provisions

Status of the Contractor's Proposals

The D & B Conditions define the Contractor's Proposals as:

“...the proposals for the Works Submitted by the Contractor in response to the Employer's Requirements, including a statement of the contract sum and the completed breakdown of Contractor's rates and prices”.

The Contractor's Proposals, together with the Employer's Requirements (which define that to be designed and built), the D&B Conditions, the Tender (and acceptance of same) and the Articles of Agreement form the contract.

Clause 5 of the D&B Conditions, deals with the order of precedence of the various documents that form the contract. The D&B Conditions have precedence over the Employer's Requirements which in turn have precedence over the Contractor's Proposals. Clause 6 of the D&B Conditions goes on to deal with the treatment of ambiguities or discrepancies and states:

“Subject to Clause 5, the several documents forming the Contract are to be taken as mutually explanatory of one another but in case of ambiguities or discrepancies (other than ambiguities or discrepancies within the Contractor's Proposals) the same shall be explained by the Supervising Officer who shall issue to the Contractor instructions clarifying such ambiguities or discrepancies. Where the Contractor makes a request in writing to the Supervising Officer for instructions under this Clause the Supervising Officer shall respond within 7 days of receipt of such request.”

The short time limit imposed on the Supervising Officer for responding to the contractor's requests for clarifications is a positive move and should help to prevent disputes relating to the issue of late design information.

The clause goes on to deal with extras or savings that may arise as a result of instructions that clarify the ambiguity. The provisions allow the Supervising Officer to increase or decrease the contract sum accordingly.

If the ambiguity or discrepancy is within the Contractor's Proposals, the contractor is obliged to inform the Supervising Officer of his proposed amendment to remove same. The Supervising Officer may either accept the contractor's proposed amendment or may issue instructions. If the Supervising Officer is of the opinion that there is a saving as a result of the proposed amendment or instruction, the benefit of that saving is given to Government and the contract sum reduced accordingly. Despite these provisions concerns remain as to what constitutes an ambiguity or discrepancy.

For example, if the Contractor's Proposals contain finishes of a generally superior but different standard to those in the Employer's Requirements are these to form the standard for the contract? Or are they taken to be a discrepancy, which is resolved in accordance with Clause 6 of the D&B Conditions, in which case the inferior Employer's Requirements would prevail. What status should be afforded to Contractor's Proposals which show a designer's impression of the finished building? In an attempt to prevent arguments and disputes relating to this matter, Works Branch issued a Technical Circular providing a non contractual Practice Note.

Whilst the D&B Conditions and the Practice Note go a long way to help prevent disputes associated with the Contractor's Proposals (and Employer's Requirements) the inclusion of both sets of design criteria within the contract is bound to be a source of dispute. Further proposals for reducing the potential for conflict in this area are described in section 5 below.

Design responsibility

Design responsibility is primarily dealt with under Clause 23 of the D&B Conditions. The first sub-clause makes it clear that the contractor has a liability for the design “as would an appropriate professional designer holding himself out as competent to take on the design of the Works provided always that in no circumstances shall the Contractor be obliged to ensure that the design is fit for its purpose”. This is a very important provision as under English Law and Hong Kong Law a contractor who has taken on the design as well as the supply of materials, labour and plant, will be under an implied obligation that the design will be fit for its purpose (Independent Broadcasting Authority v EMI Electronics Ltd and BICC Construction Ltd (1980) 14 BLR 1.) Fitness for purpose would produce an absolute liability and it would not be necessary for Government to prove negligence in a claim for defective design.

Avoiding a fitness for purpose obligation has given Government a number of advantages. Government could, if desired, have the design backed by Professional Indemnity insurance coverage (this is not currently a contract requirement). Professional Indemnity insurance coverage is not available for a fitness for purpose design obligation. A further advantage is that Government can order variations, which amend the Employer’s Requirements, without running the risk of a contractor arguing that Government’s variation has changed the purpose of the design and absolved the contractor from design liability.

The design responsibility clause does not specifically deal with the situation of design inadequacies within the Employer’s Requirements. Disputes may arise if the Employer’s Requirements do not comply with the appropriate statutory requirements. Does the contractor have to develop the design in the Contractor’s Proposals to overcome these deficiencies or does the contractor develop his design within the parameters specified in the Employer’s Requirements? Suggestions for dealing with the uncertainty created by these matters are described in section 5 below.

Evaluation of variations

The method of valuing variations is a common problem in all design and build contracts when changes are made post-contract award. As the D&B Conditions closely follow the Government’s other standard forms of contract, several of the provisions assume that the contractor’s “breakdown of the Contractor’s rates and prices” will be in sufficient detail to value the change as is done with a bill of quantities. In practice, it is unlikely that the breakdown of the Contractor’s rates and prices will be in enough detail, unless the design at tender stage was highly developed.

The D&B Conditions contain alternative provisions for evaluating variations, one of which, enables the Supervising Officer to accept a lump sum quotation submitted by the Contractor. The lump sum quotation is to include for all indirect as well as direct costs associated with the change including disturbance or prolongation costs and the costs of preparing the quotation. The Supervising Officer can either accept the lump sum quotation or reject it. If the lump sum quotation is rejected, the Supervising Officer can still order the variation to be carried out, leaving the work to be valued under other provisions, including the fixing of such rate or price as the Supervising Officer considers reasonable. Provisions also exist for adjustments to the price of other work affected by the variation. In addition, the evaluation provisions enable the Supervising Office to ask for a lump sum quotation prior to ordering the variation, in order that the cost implications may be considered before deciding to go ahead with the change.

Janssens (1991) notes that preparing change quotations “...can cause the most serious disagreements between employers and contractors, and so it is up to contractors to make sure that quotations are presented in the most acceptable way, and negotiated in an open and straightforward manner backed up by whatever detail and information an employer could reasonably expect”.

Provisions exist within the D&B Conditions for the Supervising Officer to request further information to enable him to value the variation. The dayworks provision normally found in the Government’s other standard forms of contract is absent in the D&B Conditions. Thus there is no readily available objective method of determining the non-design costs associated with a variation, in the event of a valuation disagreement between the contractor and Supervising Officer. Changes to the evaluation of variation clauses which might help prevent quantum disputes are suggested in section 5 below.

Dispute prevention procedures: suggested methods of amending the conditions of contract

The following suggested modifications to the D&B Conditions have all been made by the author on one or more private section design and build contracts in Hong Kong. The changes have been made with the objective of avoiding or minimising the incidence of disputes.

Independent checker

An independent checker is appointed to the contract, who is independent of the contractor, the contractor's designer and also independent of the employer. The independent checker not only checks the design but also checks the work during the construction phase.

A design and works checking procedure has been devised which enables the independent checker to carry out his work but at the same time keep the employer and the contract administrator (who replaces the Supervising Officer in private sector contracts) fully informed of the design process. It also enables the employer to issue variations during two distinct stages of the design approval process. This procedure enables variations to be introduced into the design process at the least disruptive time.

By using the independent checker to also check the construction element, disputes between the employer and contractor relating to the quality of workmanship or material issues are minimised. The independent checker is able to apply the design criteria objectively and, because of the earlier design checking phase, is already familiar with what is to be constructed. The works checking phase is carried out in conjunction with the contractor's own Quality Assurance plan.

Status of the Contractor's Proposals

In order to avoid disputes as to the status of the Contractor's Proposals and their relationship to the Employer's Requirements the following approach is suggested. The employer should ask for specific design proposals, for key areas of the project, in the invitation to tender. The contractor then provides this information as part of his Contractor's Proposals. If the employer likes the contractor's specific design proposals for the key areas of the project design these are incorporated into, and form part of, the Employer's Requirements. Such designs may only be changed to the extent necessary to meet any applicable statutory requirements or specified design codes. The remainder of the Contractor's Proposals are regarded as "mere proposals" and may be readily amended in any way the contractor sees fit, provided that the final design meets the parameters set out in the Employer's Requirements. This approach obliges the employer to identify, when preparing his Employer's Requirements, those aspects of the design which are important to him and conversely those aspects of the design where the contractor will be given a free hand. It is not necessary for the contractor to develop detailed proposals for these less important elements of the design at tender stage. This has the advantage of reducing the contractor's tendering cost.

As noted above, this approach requires the employer to ensure that the Employer's Requirements identify the areas of design which are important to him. The Employer's Requirements for these key areas of the design should be developed in sufficient detail so that there is a fall back position should the contractor's specific design proposals for that particular element not be acceptable to the employer. This will enable the employer to accept a particular contractor's tender for reasons of price, time and overall design but still leave the employer free to develop, post contract, that element of the design in the Contractor's Proposals which was not acceptable. This development would be achieved by the issue of variations which more closely define the Employer's Requirements.

The Employer's Requirements (as amended) take precedence over the Contractor's Proposals which are reduced to "mere proposals" to be developed as part of the design development process so as to meet the needs of the Employer's Requirements.

Design responsibility

The contractor takes over the full responsibility of the outline design embodied in the Employer's Requirements except for those aspects of the design that it would be unreasonable or unrealistic for the contractor to assume.

The contractor warrants that reasonable skill and care has been used in the design and is free to modify the Employer's Requirements in order to comply with statutory regulations. Changes to the design for which the employer retains responsibility and which arise as a result of statutory regulations are classified as variations. The contractor is given sufficient time to check properly the design during the tender period. In this regard this modification makes the contractor's design responsibilities similar to those in the ICE Design and Construct form (1992).

Evaluation of variations

The contract provisions are amended in a number of ways. Firstly, a pre-priced schedule of rates is incorporated into the contract by reference. The Government's Architectural Services Department, one of the Works Branch project Departments, publish a comprehensive schedule of rates for maintenance and minor building works. With very few amendments this schedule of rates can be adapted for use on design and build contracts and is particularly useful for pricing variations involving a change in materials or minor items. Secondly, a comprehensive dayworks schedule is incorporated into the contract for evaluating the material, labour and plant elements of variations. The dayworks schedule is particularly useful for evaluating variations that are instructed once construction works have already commenced and/or those involving alterations or demolition. Thirdly, the lump sum quotation provisions are amended so that the contractor is also obliged to state the effects, if any, that this variation will have on the programme. This enables the employer to appreciate the full impact of the variation in terms of time and money. Again, provisions exist for the employer to request these details in advance of formally ordering the variation.

Finally, there is a procedure in the dispute resolution provisions for dealing with quantum disputes that may arise in the evaluation of variations.

Dispute Resolution Procedures

It is the author's view that the existing procedure in the D&B Conditions, whereby the mediator will act as an adjudicator, in the event the parties cannot reach a mediated settlement, is flawed. It is considered that the parties will not be candid with the mediator if they know that the mediator can turn into a quasi-arbitrator and issue an award which is either binding on the parties for the duration of the contract (if subsequent notice of arbitration is given) or final and binding for all time. If the parties cannot be candid the potential for a mediated settlement is greatly reduced.

A similar procedure called "conciliation" is contained in Hong Kong's Arbitration Ordinance. The procedure enables an arbitrator with the parties' consent, to change role to a mediator/conciliator and attempt to resolve the dispute by this method. However if this attempt fails, the mediator/conciliator reverts to his former role and continues with the arbitration. Provisions exist for confidential information, learnt during the mediation/conciliation stage to be disclosed before the arbitration resumes. The conciliation procedure is similar to "med-arb" and in the author's opinion, suffers from many of the same procedural disadvantages as those noted by Brown and Marriott (1993). In the twelve years this procedure has been incorporated in the Arbitration Ordinance there has only been one reported case of successful usage, see Thomas (1992).

It is suggested therefore that the entire dispute resolution clause is replaced by the following:

A procedure whereby either the contractor or the employer may challenge any decision given by the contract administrator. The challenge to the decision takes place in a very short period after the decision is given. Failure to challenge the decision within this time period makes the decision final and binding on both parties. If a notice of disagreement is given, the contractor's site agent and the contract administrator are obliged to negotiate, in good faith during, a set period following the service of the notice of disagreement.

If the disagreement cannot be resolved by the contract administrator and the contractor's site agent, either the employer or the contractor serves a formal "Notice of Dispute". Again, there is a strict time period for serving the Notice of Dispute and failure to serve the notice within this set time leads to the disputed decision becoming final and binding on both parties.

Upon the service of the Notice of Dispute the matter is escalated upwards to a higher level of management. A senior official of the employer and the contractor's chief executive are required to meet within a set period of time to try and resolve the matter, which is the subject of the Notice of Dispute. The higher management individuals involved in this process are the type of executives who would be chosen to participate in a "Mini-Trial" or Executive Tribunal as the process is known in the United Kingdom.

There is also the possibility of disputes arising between the contractor and the employer that do not involve a decision of the contractor administrator. A separate procedure exists for bringing these disputes out into the open and trying to resolve them within a set time-frame. The provisions go so far as to require the employer and the contractor to ascertain whether there is a genuine dispute between them. Following a meeting by the employer and contractor there is a requirement to issue a formal Notice of Dispute if it is considered that there is a genuine dispute between the parties. Once again failure to serve a Notice of Dispute, within a set time-frame, prevents the party from raising this issue again in the future.

If the dispute cannot be settled by negotiation a procedure exists to refer the matter to mediation. If the parties cannot agree upon a mediator or if the mediation fails to settle the dispute, then the dispute is referred to short form arbitration. The mediation, if it takes place, does so within a short time of the original disagreement that gave rise to the Notice of Dispute. Failure to proceed with the short form arbitration makes the original decision, which is the subject of the Notice of Dispute final and binding.

Special provisions are built into the contract to deal with disputes which may arise after the physical works have been completed and the contract administrator is *functus officio*. In these circumstances, the dispute resolution procedures that take place during the construction of the works are bypassed.

The short form arbitration rules are written into the contract. The rules set out all details of the procedural matters and time-frames for the presentation of the claim, defence and counter-claim, if any. The rules enable the matter to be finally resolved by arbitration within a very short time-frame of the arbitration commencing. The arbitration itself, if it involves a single issue, will normally be concluded in a one day hearing. Provision is also made for the dispute to be settled by a documents only arbitration. The arbitration rules contain the usual provisions for the appointment and replacement of the arbitrator and enable the arbitrator to extend the time-frames or adopt the Hong Kong International Arbitration Centre's Domestic Arbitration Rules should circumstances so dictate. It is not anticipated that there will be many disputes that cannot be resolved by the short form arbitration procedure.

Quantum disputes, involving either time and/or money are resolved by a final offer arbitration process. In this process, each party's "final settlement offer" is conveyed to the arbitrator and the arbitrator, after hearing the evidence of both parties, is obliged to choose whichever of the two final settlement offer figures appears to be the more reasonable. The arbitrator is not permitted to make an award other than one or other of the two final settlement offers submitted by the parties. This procedure is an effective dispute prevention technique as it stops the parties exaggerating because the party who's case is judged the most reasonable will win the arbitration. This arbitration technique has been used successfully in the United States and reports, albeit anecdotal, have indicated that the parties usually close the quantum gap between them and settle the dispute without the need for the arbitration award.

Conclusion

The techniques described in this paper have all been used in private sector design and build contracts. The conditions of contract for these private projects have been based upon the Hong Kong Government's D&B Conditions but have been amended in a variety of ways with the objective of clarifying ambiguities, distributing risk on a more equitable basis and incorporating innovative dispute avoidance and resolution techniques. To date there have been no disputes on any of these private project design and build contracts containing these revised provisions.

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