CONTRACTOR'S STANDARD OF DUTY FOR DESIGN INTRADITIONAL PROCUREMENT SYSTEM

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ABSTRACT

Construction works involve design and construction. Under traditional procurement system, there is a strict dividing line between design and construction. The designs are normally prepared by designers who are mainly architects, engineers and specialist consultants. The construction is exclusively the duty of contractors. However, there are situations under which this strict division of design function has been transgressed by requiring contractors to prepare designs. The level of success in carrying out such construction and development activities will depend heavily on the quality of managerial, financial, technical and organisational performance of the respective parties and above all the effective coordination of such activities through a team work approach. The fragmented nature of the construction industry especially the design and construction phases, the uniqueness of the construction projects and the nature of the project organisation places great emphasis on the project team in setting up the building process and bringing the project to a successful conclusion. In certain occasions, the contractor will have to contribute to the design, speeds up construction, uses fewer production resources in order to produce a more economical job. The nominated sub-contractors that are involved in specialist activities will also be entrusted with some considerable design responsibility. Engineering works differ somewhat from building works, in that the responsibility for detailed design is more frequently left in the hands of the contractor. In Malaysia, the Standard Form of Contract PWD (Rev. 2010 edition) has even included an express clause that may require contractors to prepare standalone designs. The paper will highlight the contractors' standard of duty when preparing designs under traditional procurement system.

Keywords: Standard of Duty of care, Design liability, Traditional procurement system

1. INTRODUCTION

Construction project involve two aspects that is the design and the construction. The owner often employs a designer who will prepare the detailed plans and specifications and the general contractor who is responsible for the construction itself. Design, which involves decision-making during the drawing up of specification for the works, determination of dimension, determination of reinforcement needs and choice of working method. Design also may be applied to the work of the architect in formulating the function, structure and appearance of a building and to a structural engineer in determining the sizes of structural members. For the construction works, it will be carried out by the contractor who fulfilled a need by employing and providing all the necessary skills, providing all of the materials, plant and equipment and undertaking to build what the designers have designed for the clients. Procurement is the process of obtaining goods and service for some consideration, is one of the oldest transactions known to man. It is a simple transaction but, today's construction projects are often vast in scope, involve several designers, contractors and suppliers.

2 Nicholas Dennys, Mark Raeside, Robert Clay "Hudson's Building and Engineering Contracts" (Sweet & Maxwell, 2010)
3 Building contract dictionary
require specialist contractors and take considerable time to complete. There are several types of procurement system, among them are traditional system, design and build, management contracting, construction management etc. Different type of procurement system will put different level of duty and risk to the parties involve that is the employer, the contractor and also all the consultants.

2. BACKGROUND

In the traditional procurement system, there is a strict dividing line between the functions of design and construction. Design, on one hand includes not only the broad concept of the building but also matters of considerable detail, is the duty of the employer's design team. This normally consists of an architect or civil engineer, backed up where necessary by other specialist consultants such as structural engineers. Construction, on the other hand, is the duty of the contractor, whose obligation is simply to construct in strict accordance with the contract documents provided. Under such a procurement system, it is naturally important to decide whether any defect in the finished building is the result of a design fault or whether it arises out of bad construction, since this will determine who is to be legally responsible for the defect.

In traditional procurement system, the contractor must meet the obligation that is expressed in the contract. The criteria of acceptability of performance must, in contract, be limited to those criteria expresses or implied in the contract. This principle can see in Hii Soo Chiong v Board of Management, Leo Teng Choy v Beclidean Construction and Dancon Engineering Pte Ltd v Takasago Thermal Engineering Co Ltd. The implied terms require ‘merchantable quality’, 'workmanlike’ workmanship and fitness for purpose. Express terms are commonly either:

a) Compliance with the contract’s specification content and the drawings;
b) Satisfaction of the architect (or other supervisor); or
c) Both of the above

An example of express obligation that must be meet by the contractor is in Clause 9(a) of PWD 203(rev. 2010) and Clause 6.1 of PAM 1998 that require the contractor to use materials and workmanship that comply with the specifications. The obligation of the contractor to procure and achieve the specified standard is an absolute one. According to Lim Chong Fong (2004), if the contractor fails to do so, he would be in breach of contract unless the Superintending Officer is willing to permit a substitution by way of a variation instruction.

In the design and build procurement system, the contractor's duty is to design and complete the works in accordance with the details contained in the employer's requirement and the contractor's proposal. An example of design and build procurement system can be seen in Viking Grain Storage v TH White Installations Ltd. (1985) 33 BLR 103.

In Viking Grain Storage v TH White Installations Ltd. (1985) 33 BLR 103 the owner relied entirely on the expertise of the contractor for the design and construction of a large grain drying and storage installation under a package deal. Although soil investigations showed the absence of ground water, in the event the installation was unfit for its purpose due to the seepage of water into the various parts below ground structures. The contractor was held liable. The specification of the functional parts of the installation as a whole and
the conditions of the ground was integral and interdependent part of the whole.

The Judge, Davies J, conclude that:

"... The virtue of an implied term of fitness for purpose is that it prescribes a relatively simple and certain standard of liability based on the reasonable fitness of the finished product irrespective of considerations of fault and of whether its unfitness derives from the quality of work or material or design."

In this case, it can be seen that, under design and build procurement system, the contractors was liable for the design and have a duty to design and construct for fitness for purpose.

In certain situation, under traditional procurement system, contractors may find themselves involve with design liability. Contractors and subcontractors tend to take on a measure of design responsibility in the following ways:

a. When there is a requirement of "performance" specification

b. When the contract documents do not give sufficiently fine detail

c. When there is an implied term where contractor had to warn the employer of any defect

d. When contractors is required to take design responsibility in respect of work designed by subcontractors

e. When there is a provision in the Bill of Quantities

f. When there is express provision in the contract like Clause 22.1 in the PWD 203/203 A (Rev. 2010)

the contractor and the defendant was the employer for a project of constructing a warehouse and a block of office building. The employer claimed that the contractor was liable for the design of the watertight construction. The bill of quantity of the contract stated that:

"Watertight Construction: Retaining walls forming external walls to buildings and basement slabs are to be constructed so that they are impervious to water and damp penetration, and the contractor is responsible for maintaining these in this condition."

But what happen was that, the ground floor cracked under construction and that delayed the work, which caused the building to be occupied late. One of the questions raised in the court was that even if the ground floor was designed by the consulting engineer, the employer insisted that the contractor was still liable to ensure that the retaining wall should be waterproofed. Thus making the contractor responsible to ensure that the whole construction work was watertight as stated in the performance specification.

The court examined the facts of the case and found that the contractor had no responsibility in connection with the design as stated in the standard form of contract Joint Contract Tribunal (JCT 63). Additionally, in accordance with the terms of the applicable contract, that is JCT 03 standard form of contract, the contractor had no design liability, but only liable for the quality of construction works. Hence, in this case, the court rejected the employer’s claim against the contractor.

The judge in his judgement said that:

"on behalf of the plaintiff, contends, first of all, that clause 12(1) and the bills of quantities are tailor made in the sense that the additional provision in clause 12(1), referring to the effect of the amended or amplifying
comments upon the condition of the contract in the preliminaries bill, and those comments in the bills of quantities, show that the contract and the bill of quantities were drawn up together, secondly, the bill of quantities, except for those comments, is not to modify the condition of contract; thirdly, the 'work' in such contract is not normally interpreted as including design which is no part of the contractor's obligation; fourthly, therefore, nor so far as the bill of quantities wattleight construction specification purports to impose upon the contractor a responsibility for structural design, it is seeking to modify the interpretation of the contract condition which clause 12(1) of the contract does not permit."

Thus, it is clear that according to legal principles to this case24, when there is conflict between bill of quantity and condition of contract, the terms in the condition of contract shall prevail. It is because the purpose of the contract was not giving a responsibility to the contractor to design, but the contractor's responsibility was merely to build in strict accordance with the designer's specification and usually include a considerable measure of detail as to the quality and standard of materials and workmanship.25

In the case of Bole & Anor v Huntsbuild Ltd & Anor26 a family home was built with inadequate foundations as the trees have been removed from the site before the construction works begin. The purchasers of the property successfully claimed against both the builders and the structural engineers. The builders were liable both for breach of contract and under section 1 of the Defective Premises Act 1972. It was also found that a structural engineers' advice fell below the professional standard to be reasonably expected of them.

In the above cases the liability of the contractor for the design in traditional contract was not clearly defined and

3. ANALYSES AND FINDINGS

In Malaysia, the Standard Form of Contract PWD (rev. 2010) has included an express clause that may require the contractors to prepare standalone designs. The new term use in the PWD 203/203A (rev. 2010) that is "standalone" design means a small part of the design which will not affect the characteristic of the contract but just to make the contractor liable for the small part of the design.

The unique characteristics of the traditional procurement system is the separation of design responsibility from the construction work in the construction project. The employer will appoint consultants for the design and cost control exercise and the main contractor will be appointed to carry out the construction work. In the traditional procurement system, the contractor will have a duty to construct work in a proper and workmanlike manner, and he implicitly represent that he possesses the skill necessary to do the job he has undertaken27. Therefore, it can said that the contractor has a duty to construct with a reasonable skill and care28.

Design and build contracts can impose a higher standard than reasonable skill and care. This obligation resembles the seller's duty to supply goods which are reasonably fit for their intended purpose. The fitness for purpose requirement relates to a specific purpose, and requires the additional ingredient of reliance by the Purchaser. Each procurement system have their merits and demerits and there is an urgent need for more systematic approach of standardisation and documentation of processes, procedures and practices in the construction industry. The weaknesses and faults in the design, contracts and construction phases were due to the fragmented

24 John Mowlem & Co. Ltd vs. British Callenders Pension Trust Ltd (1977) 3 Con LR 64
25 Ibid note 4 pp.187
26 (2020) EWHC 483 (TCC)
27 Cantrell v. woodhill enterprise (1968)
approaches practiced by developers, engineers, architects, contractors and material suppliers. In traditional procurement system, the contractor will have a duty to construct work in a proper and workmanlike manner. Besides that, the contractor can have a design liability in certain situation such as:

a. When there is a requirement of “performance” specification
b. When the contract documents do not give sufficiently fine detail
c. When there is an implied term where contractor had to warn the employer of any defects
d. When there is express provision in the contract

It can be concluded from the case of John Mowlem & Con. Ltd vs. British Callenders Pension Trust Ltd\(^2\), that if there is a provision for contractor’s design liability in the bill of quantity, then the condition of contract shall prevail. In order to ensure that the design liability to contractors will be enforced, there must be a term in the condition of contract.

In the Public Work Department (PWD) 203/203A (rev 2010) standard form of contract, there is an express term that the contractor is to provide a design if required by the Government. It can be seen that in the PWD 203/203A (rev.2010) the clause clearly stated that the contractor will be liable and have to fully indemnify and keep the Government indemnified for any design defects, damage, inadequacies or insufficiency of such designs.

It can be concluded here is that, it follows the express provision for performance specified work in Amendment 12 to the JCT Standard Form of Building Contract in 1993. The main purpose of this amendment was to provide a solution to the problem which arise in the case of John Mowlem v British Insulated Callenders Pension Trust (1977) 3 Con LR. This case was related to the traditional method of construction procurement and it proceeded on the basis that the contractor was free of any design responsibility, even where a bill of quantities imposed a measure of design responsibility through a performance specification (specified in the bill of quantities) the court held that the design liability of the contractor was ineffective.

Currently there is a new express provision in the PWD 203/203A (rev. 2010) condition of contract that relate to Contractor’s design duty for Government projects. There are no case law in Malaysia related to this new provision as the PWD 203/203A (rev. 2010) has just been launched last year.

The JCT standard forms of contract have been further improved to incorporate the contractor’s design liability. The new additional forms were Minor Works Building Contract with Contractor’s Design (“MWD 2005”) and Intermediate Works Building Contract with Contractor’s Design (“ICD 2005”). The two types of contract were specifically drafted for the smaller end of the market where the contractor provides some design inputs subject to supervision from the architect or contract administrator.

4. CONCLUSION

It can be concluded that, in the modern traditional procurement system, the contractors may have a design liability that is expressed in the condition of contract. The standard of duty imposed will depend on the terms stated in the types of condition of contract used for the construction projects. The three types of standard of duty that will include the contractor’s design liability are as follows:

a. The duty to design with reasonable skill and care
b. The duty to design for fitness for purpose that is a higher level of duty
c. The duty to warn defective design

These standard duty of care can used impliedly or expressly in the condition of contract. The express provision in the condition of contract will include the contractor’s duty to design. If the condition of contract does not contain express provision as to the contractor’s design duty, the standard is fitness for purpose. Where the condition of contract
imposed express design duty, the contractors’ standard of duty is according to the express provision. The JCT standard forms of contracts have imposed reasonable skill and care in the contractor’s design liability provision. In the PWD 203/203A (rev. 2010) standard forms of contract the contractor’s design liability provision imposed fitness for purpose.

As the JCT standard forms of contract continue to improved by the inclusion of some design responsibility to the contractors, the Malaysian standard forms of contract should also incorporate these provisions in order to enable the contractors to be involved and contribute their expertise even at the pre-tender stage. An example is where a complete structure is fully designed before the contractor is chosen and the use of a proprietary system might well be excluded. This could be due to the subsequent amendments that might have to be made to the design in terms of detailed fixings and finishes. If the contractor is entrusted with the design of the proprietary system then there will be no claims for variations and the construction works will not be delayed. In Malaysia, the incorporation of the design responsibility for contractors has been applied expressly in the PWD 203/203A (rev. 2010) standard condition of contract.

REFERENCES


