THE PRACTICALITY OF APPOINTING THIRD PARTY IN THE RECTIFICATION OF DEFECTIVE WORKS

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A project report submitted in partial fulfilment of the requirement for the award of the degree of Master of Science in Construction Contract Management

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To my beloved Husband, Kids, Dad and Mom , Sisters and Brothers, and Family.

Thank you for your Du'a, supports, guidance and everything.

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In the name of Allah most gracious most merciful

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ABSTRACT

Defective works are synonymous in construction and engineering projects and have always been contentious between the employer and contractor. Defective works are usually inevitable as construction industry is unique in nature. Contractor is under obligation to rectify discoverable defective works during defect liability period in which he has to physically return to the site to rectify all the defective works on his own expenses. Although the obligation to rectify the defects and the consequences for the failure to do so was clearly stated in the contract, there have been evidences that contractor has persistently failed to fulfill such requirements. Pursuant to this issue, the appointment of third-party contractor to rectify the unattended defective works seems to be a common practice nowadays. However, the significance of this approach has never been revealed in the aspect of its implementation and practicality. Therefore, this study aims to determine the practicality of the third-party appointment to rectify the defects in the aspect of cost, time and procedures. Five (5) projects in Iskandar Puteri, Johor, which have experienced with the third-party appointment to rectify unattended defective works, were selected as the project case studies. After analyzing the collected data, the findings suggested that the appointment of third-party contractor to rectify unattended defective works have made accurate cost assessment for the remedial works. In terms of time, it is applicable at any time upon the original contractor fails to rectify the defective works and in terms of procedure, it is a convenient process to be applied by all parties, hence it is a practical approach to resolve the defective work issues. However, there are also issues and constraints in implementing the appointment, where the most observable one is during the implementation stage. The problem encountered are due to the appointment of an incompetent third-party contractor; the difficulties to manage type of defects; time and manpower constraint to attend the works; series of third-party appointment; disruption to the end users' operations and also failure to rectify the root cause of defects.

ABSTRAK

Kecacatan kerja adalah sinonim dalam industry pembinaan dan kejuruteraan projek and sering menjadi perbalahan di antara majikan dan kontraktor. Kecacatan kerja tidak dapat dielakan kerana industri pembinaan merupakan satu industri yang unik pada amnya. Pihak kontraktor bertanggungjawab untuk hadir dan membaiki apa-apa kecacatan yang dikesan semasa dalam tempuh kecacatan dengan tanggungan perbelanjaan sendiri. Walaupun kontrak telah mengariskan tanggungjawab serta akibat kegagalan mematuhi kehendak kontrak, terdapat bukti yang menunjukkan bahawa kontraktor masih lagi gagal mematuhi kehendak kontrak untuk membaiki kecacatan bangunan. Oleh yang demikian, perlantikan kontraktor pihak ketiga untuk melakukan kerja-kerja pembaik-pulihan kecacatan kerja telah menjadi satu amalan biasa di dalam projek pembinaan namun kelebihan perlaksanaan kaedah ini masih belum dikaji dari segi aspek keberkesanan perlaksanaan dan kesesuaiannya. Oleh itu, kajian ini dilakukan bagi mengkaji keberkesanan perlantikkan kontraktor pihak ketiga dalam melakukan kerja-kerja pembaik-pulihan kecacatan kerja dari segi kos, masa dan prosedur. Lima (5) projek di Iskandar Puteri, yang mempunyai pengalaman melantik kontraktor pihak ketiga untuk melakukan kerja-kerja pembaik-pulihan kecacatan kerja telah dipilih sebagai projek kajian kes. Setelah meneliti dan mengkaji data, kajian mendapati bahawa perlantikan kontraktor pihak ketiga untuk membaikpulih kecacatan kerja adalah praktikal dari segi kos kerana ketepatan pengiraan kos pembaik- pulihan kerja boleh dilakukan. Dari segi masa, perlantikan kontraktor boleh dilakukan pada bila-bila masa apabila kontraktor utama gagal untuk menangani kecacatan kerja. Dari segi prosedur, kaedah perlaksanannya adalah mudah dilakukan oleh semua pihak. Namun begitu, terdapat cabaran dalam melaksanakan kaedah ini dimana cabaran paling utama adalah sewaktu perlaksanaan kerja oleh pihak kontraktor ketiga. Cabaran yang dikenal pasti adalah perlantikan pihak kontraktor yang tidak layak, kesukaran untuk menanggani jenis kecacatan kerja oleh semua pihak, kekangan masa dan tenaga kerja dan juga kegagalan untuk membaiki punca utama penyebab kecacatan kerja.

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LIST OF ABBREVIATIONS

AC	: Appeal Cases, House of Lords
AII ER	: All England Law Reports
AMR	: All Malaysia Reports
BCL	: Building and Construction Law Cases
BLR	: Building Law Reports
BRE	: Building Research Establishment
Con LR	: Construction Law Reports
CPC	: Certificate of Practical Completion
CMGD	: Certificate of Making Good Defects
CIDB	: Construction Development Industry Board
DB	: Design and Build
DLP	: Defect Liability Period
ICE	Institution of Civil Engineers
IEM	: The Institution of Engineers Malaysia
JKR	: Jabatan Kerja Raya
MC	: Malayan Cases
MLJ	: Malaysia Law Journal
PAM	: Pertubuhan Arkitek Malaysia
PWD	: Public Work Department
QB	: Law Reports: Queen's Bench Division
SCR	: Supreme Court Reporter
UTM	: Universiti Teknologi Malaysia
WLR	: Weekly Law Report

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CHAPTER 1

INTRODUCTION

1.1 Background of the study

Defective work in construction and engineering projects is a common issue which usually arises at completion of the works. Although construction contracts contain details dealing with treatments of defective work during the course of construction, prior to completion and during the defects liability period or the rectification period, the defect issues are still being a common dispute between the employer and contractor, especially in situations where the contractor fails to rectify the defects during a period of time agreed or within Defect Liability Period (DLP). Frankel (2005) claimed that the recent burst of new construction has spawned more construction defect litigation. Hayati *et al.* (2011) suggested that the Project Management Team had failed to manage the project effectively during the project building stages.

Frankel (2005) further stated that construction defects are the contractor's failure to comply with the terms of the standard and quality of workmanship and materials required under the contract. Garrett *et al.* (2009) claimed that quality is

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evident in a number of re-works and in the overall expenditure of a project. Quality failure can occur at any stage of the construction process (Ede, 2011) and the impact of quality failure can erase the project benefits of development programme (Kakitahi *et al*, 2011).

In Malaysia, Abdul Razak *et al.* (2010) opined that the quality of the project had merely met the satisfaction. As claimed by Summerlin *et al* (2007), the low bids entered by the contractors in order to get the job has consequently resulted the works being carried out by some unskilled workers, overworked by the subcontractor and also poor supervision of the subcontracted work in order to minimise the cost by decreasing the quality of works. Meanwhile, Atkinson (1999) quoted that most of the defects in construction projects were due to human errors and the complexity of undertakings, which involved the use of a vast range of engineering methods and complicated process in modern buildings and civil structure works. According to Building Research Establishment (BRE), 90% of building failures were due to poor communication, inadequate information or failure to check information, inadequate checks and controls, lack of technical expertise and skills and inadequate feedbacks, which lead to recurring errors.

Under a contract, the contractor has to ensure the completed works upon handing over to the employer are free from defects. The employer bears the right to call back the contractor to site for any defects discovered within the DLP, and to give instructions or notices to the contractor to rectify the defective works (The Entrustry Group, 2007). The contractor is responsible to rectify the listed defects within allowed period (The Entrustry Group, 2007). However, it was noted that failing to issue the required notice shall not preclude the employer to employ another contractor to rectify the defects and recover the remedial cost (The Entrustry Group, 2007). Certificate of Making Good Defects (CMGD) will be issued to the contractor upon satisfaction and acceptance of the rectified works by the employer. Contractually, the issuance of the CMGD by the employer to the contractor, indicating the end of the contractor's obligation to rectify the defective works or any works related to the project. Nevertheless, it does not deprive the employer's right to demand rectification for defects appearing outside contract period. In common law, the contractor is still responsible for the damages due to certain circumstances, such as damages due to workmanship deficiencies within the limitation period. This is supported by the decision of the judge, the Honour Smith J in the Victorian Supreme Court in Alucraft Pty Ltd v Grocon Ltd (No 2) (1996) 2 VR 386, which held that the issuance of final certificate to contractor does not release them from instruction to rectify defective works required by the proprietor (Jim Doyle Dlp, 2005).

Upon the issuance of CMGD to the contractor, within twenty-eight (28) days or three (3) months from the date, a Final Certificate will be released to the contractor, followed by payment of remainder retention money or any payment due to the contractor.¹ The Final Certificate is a certificate that signifies the completion of the project and formally ends the contract between employer and the contractor. It is said that the project is successful when it has met the customer's stated requirements without any dispute and issues on cost, time and quality (Zarabizan Zakaria *et al.*2012). However, before the Final Certificate can be issued to the contractor, the employer and the contractor have to agree on the final cost of the project and the due amount of money to the contractor (Zarabizan Zakaria *et al.* 2012).

¹ Standard Form of Contract. PAM 2006 Clause 30.14 (b), PWD Form 203A (Rev.1/2010). Clause 31.3.pg 21.

1.2 Problem Statements

Defect issues in construction works are inevitable and have always been contentious between the employer and contractor. The unresolved defective issues may cause some negative impacts to both parties, in terms of expenditure, time and reputation in the industry. According to a report by Jabatan Audit Negara Malaysia for the year 2014 on 'Activities of Agencies and Company Management in Johor state, Version 1', there were 196 defective works that occurred within the defect liability period for 'Sekolah Agama in Johor' and these works failed to be rectified. Meanwhile, on a report by Nordin (2010) in "Lesson Learnt from RMK9 for RMK10 Project analysis on Project Failures and Defects", defects have been common in Malaysian educational and hospital projects that developed based on design and build procurement system, which had caused the government a considerable sum of money for rectification works.

The above reports show the failure of the contractor to make good defective works in the projects had consequently incurred additional expenses to the employer. Although it is stated in law that the rectification of defective works is under the contractor's obligation, in reality, however, the issues on the unattended defective works still persist. Often, contractors believe that their liability is limited to what is written in the contract. The main milestone which is to complete the works has been achieved. Hence, they are hesitant to attend any instruction for rectification of the defective works. As emphasised by Hudson (1994), under a construction contract, the contractor is obliged to construct and complete the works and supply the materials as underlined under the contract. Hudson (1994) further stated that 'whenever his work fails to conform to the contract's requirements, the contractor is in the immediate breach of contract...'

In practice, after Certificate of Practical Certificate (CPC) inspection has been carried out, the contract administrator will prepare a defective work list and notify the contractor for the remedial works. The contractor can voice objections if they think that the cause of the defects was not due to their fault, i.e. lack of maintenance or misused of the works or design fault. As stated by Lim Eng Chong (2012), the contractor is obliged to return to the site and make good the affected works duly received the contract administrator's instruction. If the contractor fails to comply with the instructions in accordance with the contract, he is responsible for the damages incurred.²

It is common for a standard contract to include the details for remedies from the employer if the contractor fails to achieve the desired quality works. PWD 203A Rev 1/2010 form of contract under sub clause 5.3 and PAM 2006 form of contract under sub clause 15.4 spelt out that the employer may engage another party to do the remedial works and all cost incurred shall be set-off to the contractor's account. Pathmavathy *et al.* (2007) stated that the possible remedies entitled to be taken by the employer are summarised as follows:

- a. To proceed with the remedial works on his own or to employ third-party contractors and then deduct the reasonable costs incurred due to the works from the retention monies
- b. To ascertain a reasonable reduction in the contract price to reflect the diminution in value of the works affected by the defects
- c. To call on the performance security
- d. To end the contract

² Standard Form of Contract. PWD Form 203A (Rev.1/2010). Clause 5.3&5.4, pg 5.

Pursuant to the preliminary interviews with the project management team, in many cases, the preferable remedies taken by the employer for the issue is by employing another party to rectify the defects and to back charge the cost incurred to the original contractor.³ Subsequent project closure, which is the issuance of final certificate only being carried out upon the CMGD has been issued. However, this option depends on the contract administrator's opinion.⁴ Procedurally, the appointment of a third-party contractor can only proceed if the original contractor has been given the opportunity to return to the site for the remedial works without significant delay. The employer is considered to have failed to mitigate their losses if the original contractor was not given the opportunity to carry out the works. As a consequence, the employer may not recover the losses from the contractor more than it would cost the contractor to carry out the repair, along with any consequential damages to which the employer has entitled (Tatham, 2014). The employer may also choose another option by ascertaining the diminution in value of the affected works if the affected works are impracticable or inconvenience for the contractor to remedy it. The contract sum or amount due to the original contractor will be deducted with such of the diminution value (Lim Chong Fong, 2004). Nevertheless, this option is rarely used due to its complicated nature of ascertaining the value of the affected works and agreeable to all parties.

In views of the above, the appointment of third-party contractor to rectify the unattended defects has been a common practice in construction projects. However, the significance of this approach has never been revealed for practicality. Therefore, this research aims to determine the practicality of appointing a third-party contractor in the rectification of defective works in the aspect of cost, time and process. The word "practicality", as defined in Merriam-Webster, in this context of study, is the quality of being to succeed and reasonable to do or use or the quality of being appropriate or suited for actual use.

³ Based on the interview with JKR QS and Engineer, Headquarter and Project Team at IRDA.

⁴Standard Form of Contract. PWD Form 203A (Rev.1/2010). Clause 48.2 and 48.3 pg 31 and 32.

1.3 Objectives of Research

The research has two objectives:

- a) To determine the practicality of appointing a third-party contractor in the rectification of defective works.
- b) To identify the challenges for appointing the third-party contractors.

1.4 The Scope and Limitations of Research

The main purpose of this research is to identify the practicality of the appointment of a third-party contractor, as an option to rectify the unattended defective works during DLP in a construction contract in the aspect of cost, time and procedure. This study is conducted by reviewing the projects having experience with third-party contractor appointment. The focus of this study is limited as below:

- a) Five (5) building projects in Iskandar Puteri, Johor which have experienced appointing third-party contractors to rectify the unattended defective works.
- b) Defective works within Defect Liability Period only.
- c) Liability of defective works between employer and main contractor only.

1.5 The Significance of the Research

The findings of this research aim to assist the employer to have a better perspective in addressing defective issues by choosing the best approach to settle it soon enough. It can also be the basic guideline, mainly to the employer and project management team if they intend to appoint the third-party contractor to make good the unattended defective works on behalf the original contractor.

1.6 Research Methodology

To achieve the objectives of this research, the stages of methods have to be used to complete this study has been organized. This research will undertake literature reviews and a comprehensive study on five (5) completed building projects, which have experienced defective works in Iskandar Puteri, Johor. This study will be carried out in five (5) stages, which involve identifying the research issue, literature reviews, data collection, data analysis, conclusions and recommendations for future works.

Stage 1 is the first stage which involves the initial study on the research topic through discussions with friends and lecturers and also through reading and preliminary studies on projects with defective issues. The objectives and the scope of the research were determined after discussing that the appointment of third-party contractor is a preferable option for the employer to close the defective issues. Besides being a preferable option, the standard form of contract i.e. PWD 203A and PAM 2006 also allow the same action to be taken by the employer, in which the incurred cost to be claimed from the original contractor as the damages suffered due

to the unattended defects works. The rationale of the option, i.e. the third-party appointment and its challenges will be studied further.

The Stage 2 of this research is the literature reviews. Once the research issues and objectives have been identified and decided, data collection from various documents, mainly on literature reviews related to the research topic will be conducted. In general, secondary data will be collected from the latest reading materials, such as books, published journal articles, research papers, project reports, newspapers as well as internet search for a better understanding of the defect matters, the contractual procedures and also the defects management trends and development over time in the construction industry. An extensive literature review on defective works, particularly at post-construction stage, will be carried out and to be discussed in Chapter 2. The objectives will be strengthened further by the collected data from these sources. The library, i.e. Perpustakaan Sulatanah Zanariah, UTM will be the main source to obtain the references of literature.

The data collection, which consists of primary and secondary data will be carried out at Stage 3. The primary data will be collected mainly through documentary analysis from Construction Law Report, Malayan Law Journal and other law journals through LexisNexis law database via UTM library electronic database and current law journal online database and will be used if related to the objectives of this research. Interviews with the project management team and contractors who involve with the unresolved defects issues will be conducted to collect information on normal practice to manage the defect issues from the stage of issuance of CPC until to the project closure stage. The primary goal is to understand their points of view and experience in adopting the third-party appointment. Meanwhile, the Secondary data is the data obtained from research findings by other researchers. Sources for the secondary data consists of books, published journal articles, research papers and project reports. Related data from the relevant Acts and Standard forms of a contract will also be collected. In summary, the methodology of this research adopts from literature reviews together with the conducting of semistructured interviews with project management team who involve in defects issues in projects located in Iskandar Puteri, Malaysia.

Stage 4 is the stage that involves data analysis, interpretation and data arrangement. At this stage, all the collected data based on the case studies and literature reviews will be selected, evaluated and the writing process towards the objective will be carried out.

Conclusions on the finding of this research will be carried out at Stage 5. It is the final stage where the whole process will be reviewed and findings from the case studies will be concluded to ascertain the achievement of the objective. Recommendations for future research will also be suggested here.

1.7 Research Questions

Since this research is basically based on project case studies, a semi-structured interviews with fifteen (15) respondents who involve directly with the chosen projects in Iskandar Puteri, Johor will be carried out to collect data and information on the appointment of a third-party contractor for remedial defective works. The questions will be based on three (3) elements that could support the significance of the appointment i.e. cost, time and procedures. There are five (5) questions which are:

a) What is the procedure and process taken by the Project Team for project closure which starts from the issuance of CPC to the Final Certificate, particularly in managing the defective issues in the contract?

- b) The common nature of defective works that occurred during DLP, i.e. due to workmanship, design deficiency, improper usage, etc.
- c) In the event of failure of the contractor to rectify the defective works, what are the preferable approaches to be chosen by Project Team as option to close the defects issues? The options have been listed in the questionnaire, which are to undertake own rectification works (employer rectify the defects by his own team); to appoint another party or third-party contractor or to ascertain the diminution in value. Three (3) scenarios will be given to the respondents according to the scale of defective works i.e. minor in nature, major in nature and the easy assessment of the quantum works. The reason for choosing the option is also required to be stated by the Respondents.
- d) Certificate of Making Good Defects (CMGD) for the project closure is required under the contract. Therefore, when is the appropriate time for the employer to issue out the CMGD to the contractor, i.e. upon the expiry of DLP and issue a letter with reasons for not issuing the CMGD to the contractor; upon the engagement of third-party contractor; or upon the completion of rectification works by the third-party contractor.
- e) What are the challenges in appointing the third-party contractor to rectify defects in projects?

1.8 Research Outlines

The research outline provides a summary of salient points of this study. This thesis consists of five (5) chapters and each one covers different scopes of studies.

Chapter 1 gives introduction on the research topic, the problem statements, research objectives, the scope and limitations of the study, the significance of research, research methodologies, research questions and outline.

Chapter 2 discusses the literature of defective works within defect liability period. It provides an insight into the terminologies of defective works in construction industry together with its nature, general causes of building defects, the liable parties and also remedies for the defects as provided in the standard form of contract, i.e. PWD 203A Rev 1/2010 and PAM 2006. The procedures to manage the defective works under the contract and the standard practice of project management will also be explored.

Chapter 3 presents the Research Methodologies being undertaken. The method used to achieve the objective will be explained with extensively review on the literature for defective issues, particularly the process and procedures to manage the defects within DLP and the project management manual. Information is also collected based on the discussions and interviews with the Project Team who involve in the project case studies. The six (6) elements of the research methodologies, i.e. Research Design; Research Location; Respondents; Research Instruments; Data Collection and Project Case Studies will be briefly explained here as well. Chapter 4 gives details on research analysis and discussions of the information collected based on the five (5) project case studies. The collected data will be analyzed, together with the standard practice in the project management process in order to determine the practicality of third-party contractor appointment for remedial defective works. The problems encountered in implementation of the approach will also be discussed.

Chapter 5 summarizes the findings of the research and draws conclusions. Some recommendations are suggested for future research.

1.9 Conclusions

Third-party contractor appointment to rectify unattended defective works in construction contract is a common practice for employers to close the remedial works that should have been accomplished by the original contractor. The practicality of this approach in term of cost, time and procedures will be determined, which is the main objective of this study. Five (5) projects in Iskandar Puteri, Johor were chosen as the project case studies with semi-structured interviews to be conducted with fifteen (15) respondents who directly involved and have experienced with the third-party contractor appointment. Data collection and analysis will be based on the five (5) questions that focused on cost, time and procedure of the third-party appointment in which the findings of the analysis will determine the practicality of this approach and the issues arise in implementing it.

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